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Applied Science &
Technology Index
1959

WITHDRAWN

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A S T M Bul—Bulletin of the American Society for Testing Materials
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Am Assn Pet Geologists Bul—Bulletin of the American Association of Petroleum Geologists
Am Cer Soc Bul—Bulletin of the American Ceramic Society
Am Cer Soc J—Journal of the American Ceramic Society
Am Chem Soc J—Journal of the American Chemical Society
Am Concrete Inst J—Journal of the American Concrete Institute
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Am Water Works Assn J—Journal of the American Water Works Association
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Arch Forum—Architectural Forum. The Magazine of Building
Arch Rec—Architectural Record
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Automation—Automation: the Magazine of Automatic Operations
Automobile Eng—Automobile Engineer
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Bell Lab Rec—Bell Laboratories Record
Bell System Tech J—Bell System Technical Journal
Brit Inst Radio Eng J—Journal of the British Institution of Radio Engineers
Brit Plastics—British Plastics
Can Chem Process—Canadian Chemical Processing
Can J Chem Eng—Canadian Journal of Chemical Engineering
Can Min & Met Bul—Canadian Mining and Metallurgical Bulletin
Cer Ind—Ceramic Industry
Chem & Eng N—Chemical and Engineering News
Chem & Ind—Chemistry and Industry
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Econ Geol—Economic Geology
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I S A J—ISA Journal
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- Ind & Eng Chem**—Industrial and Engineering Chemistry
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Ind Phot—Industrial Photography
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J Metals—Journal of Metals
J Nutrition—Journal of Nutrition
J Pet Tech—Journal of Petroleum Technology
J Res Nat Bur Stand—Journal of Research of the National Bureau of Standards
J Sci Instr—Journal of Scientific Instruments
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Min Eng—Mining Engineering
Mod Materials Handling—Modern Materials Handling
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Mod Phot—Modern Photography
Mod Plastics—Modern Plastics
Mod Textiles Mag—Modern Textiles Magazine
- Noise Control**—Noise Control
Nucleonics—Nucleonics
- Oil & Gas J**—Oil and Gas Journal
Op Res—Operations Research
- Paint Oil & Chem R**—Paint, Oil and Chemical Review
Paper Ind—Paper Industry
Pet Eng—Petroleum Engineer; Management Edition
Pet Refiner—Petroleum Refiner
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Plastics World—Plastics World
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Product Eng—Product Engineering
Prog Arch—Progressive Architecture
Pub Roads—Public Roads
Pub Works—Public Works
- Q S T**—QST
- RCA R**—RCA Review
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Rock Prod—Rock Products
Roy Aeronautical Soc J—Journal of the Royal Aeronautical Society
Rubber Age—Rubber Age
Rubber Chem & Tech—Rubber Chemistry and Technology
Rubber World—Rubber World
- S A E J**—SAE Journal
SMPTE J—Journal of the Society of Motion Picture and Television Engineers
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Sewage & Ind Wastes—Sewage and Industrial Wastes
Soap & Chem Spec—Soap and Chemical Specialties
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Soc Dyers & Col J—Journal of the Society of Dyers and Colourists
Soc Motion Picture & Television Eng J. See SMPTE J
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- Water & Sewage Works**—Water & Sewage Works
Water Works Eng—Water Works Engineering
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Welding J—Welding Journal
Westinghouse Eng—Westinghouse Engineer
Wire & Wire Prod—Wire and Wire Products
Wireless World—Wireless World

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APPLIED SCIENCE &
TECHNOLOGY INDEX

1959

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1959

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R. P.

List of Periodicals Indexed

- A I Ch E J**—Journal of the American Institute of Chemical Engineers. \$9 q American Institute of Chemical Engineers, 25 W 45th St, New York 36
- A M A Archives Ind Health**—A.M.A. Archives of Industrial Health. \$8 m American Medical Association, 535 N Dearborn St, Chicago 10
- ARS J**—ARS Journal. \$12.50 m American Rocket Society, Inc. and American Interplanetary Society, 500 Fifth Av, New York 36
Formerly Jet Propulsion; changed January, 1959
- ASHRAE J**—ASHRAE Journal. \$5 m American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 234 Fifth Av, New York 1
Formerly Refrigerating Engineering; changed March, 1959
- A S M E Trans**—Transactions of the American Society of Mechanical Engineers. \$10 American Society of Mechanical Engineers, 29 W 39th St, New York 18
Published in 5 parts: ser A, Journal of Engineering for Power, q (Ja); ser B, Journal of Engineering for Industry, q (F); ser C, Journal of Heat Transfer, q (F); ser D, Journal of Basic Engineering, q (Mr); ser E, Journal of Applied Mechanics, q (Mr)
\$5 to members and affiliates
- A S T M Bul**—Bulletin of the American Society for Testing Materials. \$3.50 8 times a yr American Society for Testing Materials, 1916 Race St, Philadelphia 3
- Aero/Space Eng**—Aero/Space Engineering. \$5 m Institute of the Aeronautical Sciences, Inc. 2 E 64th St, New York 21
- Air Cond Heat & Ven**—Air Conditioning Heating and Ventilating. \$3 m Industrial Press, 93 Worth St, New York 13
- Aircraft Eng**—Aircraft Engineering. 40s; U.S. \$6.50; Canada \$6.50 m Bunhill Publications, Ltd. 12 Bloomsbury Square, London, W.C. 1
- Am Assn Pet Geologists Bul**—Bulletin of the American Association of Petroleum Geologists. \$18 m American Association of Petroleum Geologists, Inc. Box 979, Tulsa, 1, Okla.
- Am Cer Soc Bul**—Bulletin of the American Ceramic Society. \$5 m American Ceramic Society, 4055 N High St, Columbus 14, Ohio
- Am Cer Soc J**—Journal of the American Ceramic Society; Ceramic Abstracts. \$20 including Ceramic Bulletin m American Ceramic Society, 4055 N High St, Columbus 14, Ohio
- Am Chem Soc J**—Journal of the American Chemical Society. \$30 s-m American Chemical Society, 1155 16th St, N.W., Washington 6, D.C.
- Am Concrete Inst J**—Journal of the American Concrete Institute. \$18 m American Concrete Institute, P.O. Box 4754 Redford Station, Detroit 19, Mich.
- Am Dyestuff Rep**—American Dyestuff Reporter. \$7.50 bi-w Howes Pub. Co, 44 E 23d St, New York 10
- Am Gas Assn Mo**—American Gas Association Monthly. \$5 m (bi-m JI-Ag) American Gas Assn, Inc. 420 Lexington Av, New York 17
- Am Inst Chem Eng J**. See A I Ch E J
- Am J Clinical Nutrition**—American Journal of Clinical Nutrition. \$8 bi-m The American Journal of Clinical Nutrition, Inc. 11 E 36th St, New York 16
- Am J Phys**—American Journal of Physics. \$10 m (except Je, JI and Ag) American Institute of Physics, Inc. 335 E 45th St, New York 17
- Am J Pub Health**—American Journal of Public Health and the Nation's Health. \$12 m American Public Health Association, Inc. 1790 Broadway, New York 19
- Am Mach**—American Machinist. \$3 bi-w McGraw-Hill Pub. Co, Inc. 330 W 42d St, New York 36
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- Am Mineralogist**—American Mineralogist. \$6 bi-m U.S. Geological Survey, Washington 25, D.C.
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- Am Perfumer & Aromatics**—American Perfumer and Aromatics. \$5 m Moore Pub. Co, Inc. 48 W 38th St, New York 18
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- Am Soc Naval Eng J**—Journal of the American Society of Naval Engineers. \$12 q American Society of Naval Engineers, Inc. 1012 14th St, N.W., Washington 5, D.C.
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- Anal Chem**—Analytical Chemistry. \$5 m American Chemical Society, 1155 16th St, N.W., Washington 6, D.C.
- Ap Hydraulics & Pneumatics**—Applied Hydraulics and Pneumatics. \$7 m Industrial Pub. Corp. 812 Huron Rd, Cleveland 15
- Applications & Ind**—Applications and Industry. \$8 bi-m American Institute of Electrical Engineers, 33 W 39th St, New York 18
- Arch Forum**—Architectural Forum, The Magazine of Building. \$6.50 m Time, Inc. 9 Rockefeller Plaza, New York 20
- Arch Rec**—Architectural Record. \$5.50 m F. W. Dodge Corp, 119 W 40th St, New York 18
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- Assn for Computing Mach J**—Journal of the Association for Computing Machinery. \$10 q Association for Computing Machinery, 2 E 63d St, New York 21
- Audio**—Audio. \$4 m Radio Magazines, Inc. 204 Front St, Mineola, New York
- Audio Eng Soc J**—Journal of the Audio Engineering Society. \$8 q Audio Engineering Society, P.O. Box 12, Old Chelsea Station, New York 11
- Automation**—Automation; the Magazine of Automatic Manufacturing Operations. \$10 m Penton Pub. Co, Penton Bldg, Cleveland 13
- Automobile Eng**—The Automobile Engineer. £3; U.S. \$8.50; Canada \$8.50 m Iliffe & Sons, Ltd, Dorset House, Stamford St, London, S.E. 1
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- Brit Inst Radio Eng J**—Journal of the British Institution of Radio Engineers. 80s m British Institution of Radio Engineers, 9 Bedford Square, London, W.C. 1
- Brit Plastics**—British Plastics. £2 12s; U.S. \$7.50; Canada \$7.50 m Iliffe & Sons, Ltd, Dorset House, Stamford St, London, S.E. 1
- Can Chem Process**—Canadian Chemical Processing. \$6; U.S. \$10 m Hugh C. Maclean Publications, Ltd. 1450 Don Mills Rd, Don Mills, Ontario, Canada
- Can J Chem Eng**—Canadian Journal of Chemical Engineering. \$3; U.S. \$4 bi-m Chemical Institute of Canada, 48 Rideau St, Ottawa 2, Ont.
- Can Min & Met Bul**—Canadian Mining and Metallurgical Bulletin. \$12 m Canadian Institute of Mining and Metallurgy, 906 Drummond Bldg, Montreal, Que.
- Ap Sci Ann/59**

- Cer Ind**—Ceramic Industry. \$4 m Industrial Publications, Inc, 5 So. Wabash Av, Chicago 3
- Chem & Eng N**—Chemical and Engineering News. \$6 w American Chemical Society, 1155 16th St, N.W., Washington 6, D.C.
- Chem & Ind**—Chemistry and Industry. £5 w Society of Chemical Industry, 14 Belgrave Square, London, S.W. 1
- Chem Eng**—Chemical Engineering. \$3 bi-w McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 36
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- Com & Electronics**—Communication and Electronics. \$8 bi-m American Institute of Electrical Engineers, 33 W 39th St, New York 18
- Combustion**—Combustion. \$4 m Combustion Pub. Co, Inc, 200 Madison Av, New York 16
- Comp Air Mag**—Compressed Air Magazine. \$5 m Compressed Air Magazine Co, 942 Memorial Parkway, Phillipsburg, N.J.
- Concrete**—Concrete. \$6 m Concrete Pub. Corp, Daily News Plaza, 400 W Madison St, Chicago 6
- Control Eng**—Control Engineering. \$5 m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 36
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- Diesel Power**—Diesel Power. \$4 m Diesel Publications, Inc, 80 Lincoln Av, Stamford, Conn.
- Dom Eng**—Domestic Engineering. \$5 m Domestic Engineering Co, 1801 Prairie Av, Chicago 16
- Drug & Cosmetic Ind**—Drug and Cosmetic Industry. \$3 m Drug Markets, Inc, 101 W 31st St, New York 1
- Econ Geol**—Economic Geology and the Bulletin of the Society of Economic Geologists. \$6.50 s-q Economic Geology Pub. Co, M. M. Leighton, Business Mgr, Urbana, Ill.
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- Electronic Eng**—Electronic Engineering. £1 16s; U.S. \$5; Canada \$5 m Morgan Brothers, Ltd, 28, Essex St, Strand, London, W.C. 2
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- Eng N**—Engineering News-Record. \$6 w McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 36
- Engineer**—Engineer. £5 10s; Canadian subs £5 5s w Morgan Brothers, Ltd, 28, Essex St, Strand, London, W.C. 2
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- Geol Soc Bul**—Bulletin of the Geological Society of America. \$15 m Geological Society of America, H. R. Aldrich, sec, 419 W 117th St, New York 27
- Geophysics**—Geophysics. \$10 5 times a yr Society of Exploration Geophysicists, Colin Campbell, Business Manager, Box 1536, Tulsa 1, Okla.
- Glass Ind**—Glass Industry. \$5 m Ogden Pub. Co, 55 W 42d St, New York 36
- Heating-Piping**—Heating, Piping and Air Conditioning. \$3 m Keeney Pub. Co, 6 N Michigan Av, Chicago 2
- I S A J**—ISA Journal. \$4 m Instrument Society of America, 313 6th Av, Pittsburgh 22
- Illum Eng**—Illuminating Engineering, The Journal of the Illuminating Engineering Society. \$18 m Illuminating Engineering Society, 1860 Broadway, New York 23
- Ind & Eng Chem**—Industrial and Engineering Chemistry. \$5 m American Chemical Society, 1155 16th St, N.W., Washington 6, D.C.
- Ind Chem**—Industrial Chemist. 40s m Tothill Press Ltd, 33 Tothill St, Westminster, London, S.W. 1
- Ind Finishing**—Industrial Finishing. \$3 m Practical Publications, Inc, 1142 N. Meridian St, Indianapolis 4
- Ind Lab**—Industrial Laboratories, The Magazine of Research and Development. \$10 m F. D. Thompson Publications, Inc, 201 N. Wells St, Chicago 6
- Ind Med**—Industrial Medicine and Surgery. \$6 m Industrial Medicine Pub. Co, 400 S.W. 69th Av, Miami 44, Fla.
- Ind Phot**—Industrial Photography. \$6 m Photography in Business, Inc, 10 E 40th St, New York 16
- Ind Quality Control**—Industrial Quality Control. \$9 m American Society for Quality Control, Inc, 161 W Wisconsin Av, Milwaukee 3
- Inland & Am Ptr & Lithogr**—Inland and American Printer and Lithographer. \$5 m Maclean-Hunter Pub. Corp, 79 W Monroe St, Chicago 3
- Inst E E Proc**—Proceedings of the Institution of Electrical Engineers. The Institution, Savoy Place, Victoria Embankment, London, W.C. 2
- Published in 2 parts: pt A, Power Engineering, bi-m (F); pt B, Electronic and Communication Engineering (including Radio Engineering) bi-m (Ja)
- Inst Mech Eng Proc**—Proceedings of the Institution of Mechanical Engineers, separate papers Institution of Mechanical Engineers, 1 Birdcage Walk, Westminster, London, S.W. 1
- Inst Metals J**—Journal of the Institute of Metals. 180s m Institute of Metals, 17 Belgrave Square, London, S.W. 1
- Inst Pet J**—Journal of the Institute of Petroleum. £4 14s 6d. m Institute of Petroleum, 61 New Cavendish St, London, W. 1
- Inst Radio Eng Proc**—Proceedings of the Institute of Radio Engineers. \$18 m Institute of Radio Engineers, Inc, 1 E 79th St, New York 21
- Instrument Soc Am J**. See I S A J
- Instruments & Automation**—Instruments and Automation. \$4 m Instruments Pub. Co, Inc, 845 Ridge Av, Pittsburgh 12, Pa.
- Name changed to Instruments and Control Systems February, 1959

Instruments & Control Systems—Instruments and Control Systems. \$4 m Instruments Pub. Co. Inc. 845 Ridge Av. Pittsburgh 12, Pa.
Iron Age—Iron Age. \$15 w Chilton Co., Inc. Chestnut & 56th Sts. Philadelphia 39
Iron & Steel Eng—Iron and Steel Engineer. \$7.50 m Association of Iron and Steel Engineers. 1010 Empire Bldg. Pittsburgh 22
Iron & Steel Inst J—Journal of the Iron and Steel Institute. £12 m Iron and Steel Institute, 4, Grosvenor Gardens, London, S.W. 1

J Aero/Space Sci—Journal of the Aero/Space Sciences. \$15 m Institute of the Aeronautical Sciences, Inc. 2 E 64th St. New York 21
J Agri & Food Chem—Journal of Agricultural and Food Chemistry. \$6 m American Chemical Society, 1155 16th St. N.W. Washington 6, D.C.
J Ap Chem—Journal of Applied Chemistry. £15 m Society of Chemical Industry, 14 Belgrave Square, London, S.W. 1
J Ap Mech—Journal of Applied Mechanics. \$5 q American Society of Mechanical Engineers, 29 W 39th St. New York 18
J Ap Phys—Journal of Applied Physics. \$14 m American Institute of Physics, 335 E 45th St. New York 17

\$12 to members and associate members of the American Institute of Physics

J Basic Eng. See A S M E Trans
J Colloid Sci—Journal of Colloid Science. \$17.50 bi-m Academic Press Inc, Mt Royal & Guilford Aves, Baltimore 2
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J Eng Power. See A S M E Trans
J Geol—Journal of Geology. \$8 bi-m University of Chicago Press, 5750 Ellis Av. Chicago 37
J Heat Transfer. See A S M E Trans
J Math & Phys—Journal of Mathematics and Physics. \$6 q Massachusetts Institute of Technology, Cambridge 39, Mass.
J Metals—Journal of Metals. \$10 m American Institute of Mining, Metallurgical and Petroleum Engineers, Inc. 29 W 39th St. New York 18
J Nutrition—Journal of Nutrition. \$22.50 m Wistar Institute of Anatomy and Biology, 36th St at Spruce, Philadelphia 4
J Pet Tech—Journal of Petroleum Technology. \$8 m Society of Petroleum Engineers of AIME, 6300 North Central Expressway, Dallas 6
J Res Nat Bur Stand—Journal of Research of the National Bureau of Standards. Superintendent of Documents, Washington 25, D.C. Published in 4 sections beginning July-August, 1959: A. Physics and Chemistry \$4 bi-m; B. Mathematics and Mathematical Physics \$2.25 q; C. Engineering and Instrumentation \$2.25 q; D. Radio Propagation \$4 bi-m
J Sci Instr—Journal of Scientific Instruments. £6; U.S. \$17 m Institute of Physics, 47 Belgrave Square, London, S.W. 1
Jet Propulsion—Jet Propulsion. \$12.50 m American Rocket Society, 500 5th Av. New York 36
 Name changed to ARS Journal January, 1959

Light Metal Age—Light Metal Age. \$4 bi-m Roy Fellom, Jr. 549 W Randolph St. Chicago 6
Lub Eng—Lubrication Engineering. \$6 m American Society of Lubrication Engineers. 5 N. Wabash Av. Chicago 2

Mach—Machinery. \$10 m Industrial Press. 93 Worth St. New York 13
Machine Design—Machine Design. \$10 bi-w Penton Pub. Co. Penton Bldg. Cleveland 13
Mag of Stand—Magazine of Standards. \$7 m American Standards Association, Inc. 70 E 45th St. New York 17
Manuf Chem—Manufacturing Chemist. £2 m Leonard Hill, Ltd. Eden St. London, N.W. 1
Marine Eng/Log—Marine Engineering/Log. \$4 m (s-m in May) Simmons-Boardman Pub. Corp. 30 Church St. New York 7
Materials in Design Eng—Materials in Design Engineering. \$3 m Reinhold Pub. Corp. 430 Park Av. New York 22
 Extra number published in Mid-October
Mech Eng—Mechanical Engineering. \$7 m American Society of Mechanical Engineers, 29 W 39th St. New York 18

Metal Finishing—Metal Finishing. \$5 m Metals and Plastics Publications, Inc. 381 Broadway, Westwood, N.J.
Metal Prog—Metal Progress. \$9 m American Society for Metals, Metals Park, Novelty, Ohio
Metallurgia—Metallurgia, the British Journal of Metals. 30s m Kennedy Press, Ltd, 31 King St. W. Manchester 3
Mill & Factory—Mill & Factory. m Conover-Mast Publications, Inc. 205 E 42d St. New York 17

Price on request

Min Cong J—Mining Congress Journal. \$3 m American Mining Congress, 1102 Ring Bldg, Washington 6, D.C.
Min Eng—Mining Engineering. \$8 m American Institute of Mining, Metallurgical and Petroleum Engineers, Inc. 29 W 39th St. New York 18
Mod Materials Handling—Modern Materials Handling. \$8 m Modern Materials Handling, 221 Columbus Av. Boston 16
Mod Metals—Modern Metals. \$3 m Modern Metals Pub. Co. 435 N. Michigan Av. Chicago 11
Mod Phot—Modern Photography. \$4 m Photography Pub. Corp. 33 W 60th St. New York 23
Mod Plastics—Modern Plastics. \$7 m Modern Plastics, Inc. 575 Madison Av. New York 22
Mod Textiles Mag—Modern Textiles Magazine. \$5 m Rayon Pub. Corp. 303 Fifth Av. New York 16

Noise Control—Noise Control. \$8 bi-m Noise Control. 335 E 45th St. New York 17
Nucleonics—Nucleonics. \$8 m McGraw-Hill Pub. Co. Inc. 330 W 42d St. New York 36

Oil & Gas J—Oil and Gas Journal. \$5 w Petroleum Pub. Co. 211 South Cheyenne Av. Tulsa 3, Okla.
Op Res—Operations Research. \$10 bi-m Operations Research Society of America, Mt Royal and Guilford Aves, Baltimore 2

Paint Oil & Chem R—Paint, Oil and Chemical Review. \$3 bi-w Trade Review Co. 332 W Harrison St. Oak Park, Ill.

Paper Ind—Paper Industry. \$3 m Fritz Publications, Inc. 431 S Dearborn St. Chicago 5
Pet Eng—Petroleum Engineer; Management Edition. \$8 m Petroleum Engineer Pub. Co. 800 Davis Bldg. Dallas 2

Pet Refiner—Petroleum Refiner. \$2 m Gulf Pub. Co. Box 2608, Houston 1, Tex.

Phys Today—Physics Today. \$4 m American Institute of Physics, 335 E 45th St. New York 17

Pit & Quarry—Pit and Quarry. \$3 m Pit and Quarry Publications, Inc. 431 S Dearborn St. Chicago 5

Plant—Plant. \$6 m Plant Pub. Co. Wheaton, Ill.

Plant & Power Services Eng—Plant and Power Services Engineer. \$10 m Putman Pub. Co. 111 E Delaware Place. Chicago 11
 Formerly Power Industry; changed May, 1959

Plant Eng—Plant Engineering. \$10 m Technical Pub. Co. 308 E. James St. Barrington, Ill.

Plastics Tech—Plastics Technology, The Magazine of Applied Engineering. \$7 m Bill Brothers Pub. Corp. 630 Third Av. New York 17

Plastics World—Plastics World. \$5 m Cleworth Pub. Co. Inc. 1 River Road, Cos Cob, Conn.
Plating—Plating. \$5 m American Electroplaters' Society, Inc. 5800 N Marvine St. Philadelphia 41

Power—Power. \$5 m McGraw-Hill Pub. Co. Inc. 330 W 42d St. New York 36

Power Apparatus & Systems—Power Apparatus and Systems. \$8 bi-m American Institute of Electrical Engineers, 33 W 39th St. New York 18

Power Eng—Power Engineering. \$10 m Power Engineering, 308 E. James St., Barrington, Ill.

Power Ind—Power Industry. Including Industrial Power and Industry Power. \$10 m Putman Pub. Co. 111 E Delaware Place. Chicago 11

Name changed to Plant and Power Services Engineer May, 1959

Product Eng—Product Engineering. \$5 w McGraw-Hill Pub. Co. Inc. 330 W 42d St. New York 36

Extra number published in Mid-September

- Prog Arch**—Progressive Architecture. \$5 m Reinhold Pub. Corp, 430 Park Av, New York 22
- Pub Roads**—Public Roads. \$1 bi-m Superintendent of Documents, Washington 25, D.C.
- Pub Works**—Public Works. \$5 m Public Works Journal Corp, 200 S Broad St, Ridgewood, N.J.
- Q S T**—QST. \$5 m American Radio Relay League, Inc, 38 La Salle Rd, West Hartford 7, Conn.
- RCA R**—RCA Review. \$2 q Radio Corporation of America, RCA Laboratories Division, Princeton, N.J.
- R Sci Instr**—Review of Scientific Instruments. \$11 m American Institute of Physics, 335 E 45th St, New York 17
\$9 to members of scientific societies
- Radio Corp Am R**. See RCA R
- Radio-Electronics**—Radio-Electronics. \$4 m Gernsback Publications, Inc, 154 W 14th St, New York 11
- Refrig Eng**—Refrigerating Engineering Including Air Conditioning. \$5 m American Society of Refrigerating Engineers, 234 Fifth Av, New York 1
Name changed to ASHRAE Journal March, 1959
- Research**—Research, Applied in Industry. £3 5s; U.S. \$10.75 m Butterworths Publications, Ltd, 88 Kingsway, London, W.C. 2
- Roads & Sts**—Roads and Streets. \$6 m Gillette Pub. Co, 22 West Maple St, Chicago 10
- Rock Prod**—Rock Products. \$3 m Maclean-Hunter Pub. Corp, 79 W Monroe St, Chicago 3
- Roy Aeronautical Soc J**—Journal of the Royal Aeronautical Society. £7 10s m Royal Aeronautical Society, 4 Hamilton Place, London, W. 1
- Rubber Age**—Rubber Age. \$5 m Palmerton Pub. Co, Inc, 101 W 31st St, New York 1
- Rubber Chem & Tech**—Rubber Chemistry and Technology. \$9.50 5 times a yr American Chemical Society, Division of Rubber Chemistry, Prince and Lemon Sts, Lancaster, Pa.
- Rubber World**—Rubber World. \$5 m Bill Brothers Pub. Corp, 630 3d Av, New York 17
- S A E J**—SAE Journal. \$12 m Society of Automotive Engineers, Inc, 485 Lexington Av, New York 17
- SMPTE J**—Journal of the Society of Motion Picture and Television Engineers. \$12.50 m Society of Motion Picture and Television Engineers, 55 W 42d St, New York 36
- Safety Maint**—Safety Maintenance. \$4 m Alfred M. Best Co, Inc, 75 Fulton St, New York 38
- Sci Am**—Scientific American. \$6 m Scientific American, Inc, 415 Madison Av, New York 17
- Sewage & Ind Wastes**—Sewage and Industrial Wastes. \$7.50 m Federation of Sewage and Industrial Wastes Associations, 4435 Wisconsin Av, N.W., Washington 16, D.C.
- Soap & Chem Spec**—Soap and Chemical Specialties. \$4 m MacNair-Dorland Co, Inc, 254 W 31st St, New York 1
- Soc Automotive Eng J**. See S A E J
- Soc Dyers & Col J**—Journal of the Society of Dyers and Colourists. £5 5s m Society of Dyers and Colourists, Dean House, 19 Piccadilly, Bradford 1, Yorkshire, England
- Soc Motion Picture & Television Eng J**. See SMPTE J
- Space/Aeronautics**—Space/Aeronautics. \$10 m Conover-Mast Publications, Inc, 205 E 42d St, New York 17
- Steel**—Steel. \$10 w Penton Pub. Co, Penton Bldg, Cleveland 13
- Tappi**—Tappi. \$10 m Technical Association of the Pulp and Paper Industry, 360 Lexington Av, New York 17
- Tech Assn Pulp & Paper Ind**. See Tappi
- Textile Ind**—Textile Industries. \$2 m W. R. C. Smith Pub. Co, 806 Peachtree St, N.E. Atlanta 8
Extra number published in Mid-September
- Textile Res J**—Textile Research Journal. \$25 m Textile Research Institute, Inc, Publications Department, P.O. Box 625, Princeton, N.J.
- Textile World**—Textile World. \$2 m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 36
Extra number published in Mid-July
- Tool Eng**—Tool Engineer. \$6 m (s-m in June) American Society of Tool Engineers, 10700 Puritan Av, Detroit 38
- Traffic Q**—Traffic Quarterly. q Eno Foundation for Highway Traffic Control, Inc, Saugatuck, Conn.
Price on request
- Water & Sewage Works**—Water & Sewage Works. \$5 m Scranton Pub. Co, 185 N Wabash Av, Chicago 1
Two numbers published in September, included in annual subscription
- Water Works Eng**—Water Works Engineering. \$3 m Water Works Engineering, 466 Lexington Av, New York 17
- Welding Eng**—Welding Engineer. \$3 m Welding Engineer Publications, Inc, P.O. Box 28, Morton Grove, Ill.
Extra number published in Mid-June
- Welding J**—Welding Journal. \$8 m American Welding Society, 33 W 39th St, New York 18
- Westinghouse Eng**—Westinghouse Engineer. \$2.50 bi-m Westinghouse Engineer, P.O. Box 2278, 3 Gateway Center, Pittsburgh 30
- Wire & Wire Prod**—Wire and Wire Products. \$8 m Quinn-Brown Pub. Corp, 453 Main St, Stamford, Conn.
- Wireless World**—Wireless World. £1 15s; U.S. \$5; Canada \$5 m Iliffe and Sons, Ltd, Dorset House, Stamford St, London, S.E. 1

Key to General Abbreviations

+	continued on later pages of the issue	Jl	July
abr	abridged	Mr	March
Ag	August	My	May
Ap	April	N	November
arch	architect	n s	new series
bibliog	bibliography	no	number
comp	compiled or compiler	O	October
cond	condensed	p	page
cont	continued	pl	plate
D	December	por	portrait
diag	diagram	pseud	pseudonym
ed	edited or edition or editor	pt	part
F	February	rev	revised
il	illustrations	S	September
inc	incorporated	sup	supplement
Ja	January	tr	translated or transla- tion or translator
Je	June	v	volume
		yrbk	yearbook

Sample entry: **ELECTRIC wire**

Protection

Aluminized strand service test results, E. B.
Brant, il Wire & Wire Prod 34:1101+ S '59

Explanation:

An illustrated article on the subject **ELEC-
TRIC wire—Protection** entitled "Aluminized
strand service test results," by E. B. Brant,
will be found in volume 34 of Wire and Wire
Products, page 1101 (continued on later
pages of the same issue) the September 1953
number.

Applied Science & Technology Index

1959

ABS (alkyl benzenesulfonate). See Benzenesulfonates

ACTH

Corticotropins (ACTH). J. Léonis and others. bibliog il diag Am Chem Soc J 81:415-23 Ja 20 '59

Pituitary-adrenal response following trauma to the isolated leg; abstract. R. H. Egdahl. Ind Med 28:429 S '59

ACTION. See American council to improve our neighborhoods

ADS. See Association of Diesel specialists

AALTO, Alvar

Finland and architect Aalto, J. E. Burchard. il diags Arch Rec 125:126-36 Ja '59

ABACUS

Origin and development of the Chinese abacus. S. T. Li. bibliog il Assn for Computing Mach J 6:102-10 Ja '59

ABANDONED mines. See Mines and mineral resources—Abandoned mines

ABBREVIATIONS

Common electronic abbreviations. Electronic Ind 18:32+ Je '59

See also

Symbols

ABERRATION (optics)

Evaluation of lens distortion by visual and photographic methods. F. E. Washer and others. il J Res Nat Bur Stand 61:509-15 D '58

Lens design, a new approach. O. N. Stavroudis. diags J Res Nat Bur Stand 63B:31-42 Jl '59

Spherical aberration constant. G. D. Archard. R Sci Instr 29:1049-50 N '58

ABIETIC acid

Preparation of 6-hydroxydehydroabietic acid from the photoperoxide of levopimaric acid. R. N. Moore and R. V. Lawrence. bibliog Am Chem Soc J 81:458-60 Ja 20 '59

ABILENE, Texas

Sewerage

Sewer extension policies. S. A. Garza and others. Water & Sewage Works 106:125 Mr '59

ABILITY

See also

Creative ability

ABILITY tests

Do you hire the blind to see? use of personnel selection tools. R. I. Weil. Textile Ind 123: 97-8 Jl '59

How satisfactory are pre-employment company examinations for engineers? points of view. Product Eng 30:40-1 Ap 20 '59

R for quality products, quality workers; Miniature precision bearings, inc. C. J. Vlahos. il Mill & Factory 63:100-1 O '58

ABORTION

Abortion in the United States. M. S. Calderone, ed. Review, by J. R. Newman. Sci Am 200:149-50+ Ja '59

ABRASION

Abrasion of vulcanized rubber against wire gauze. S. B. Ratner and others. bibliog Rubber Chem & Tech 32:471-6 Ap '59

Abrasion resistance of fabrics; evaluation of wear by means of the Accelerotor. il Am Dyestuff Rep 48:127-9 S 21 '59

Friction and abrasion of rubber. A. Schallamach. bibliog il diags Rubber Chem & Tech 31:982-1014 D '58

Further development and use of the Armstrong sandpaper abrasion machine. F. M. Gavan. bibliog il A S T M Bul p44-8 My '59

Improvement of selected physical properties of partially acetylated cotton fabrics. A. S. Cooper, jr. and others. bibliog Am Dyestuff Rep 48:43-9 O 5 '59

Interpretation of fiber properties; role of single fiber flex fatigue in abrasion resistance of fabrics. T. B. Lefferdink and H. P. Briar. diags Textile Res J 29:477-82 Je '59

Method for determining abrasion resistance of thick anodic coatings on aluminum. B. E. Deal. bibliog il Plating 46:823-7 Jl '59

New method for determining the wet adherence of supported films to various bases. A. S. Diamond. bibliog il diags A S T M Bul p48-54 F '59

Surface heating by friction and abrasion by thermal decomposition. W. Viehmann. diags Rubber Chem & Tech 31:925-40 O '58

ABRASIVE belts

Abrasive belt grinding upgrades metal bonds. il Steel 144:90 My 4 '59

Abrasive belt performance influenced by several factors. R. W. Reed. il diags Plating 46:27-30 Ja '59

Abrasive-belt shortcut stresses polish before forming. R. H. Eshelman. il diags Iron Age 183:129-31 Je 11 '59

Acme introduces abrasive belt finishing machine line. il Am Mach 103:146 Jl 13 '59

Belt grinding titanium. C. T. Olofson. Light Metal Age 17:6-7 Je '59

Better finishing; grinding and polishing with abrasive belts. W. K. Seward. il diag Metal Prog 76:95-100 S '59

Centerless belt grinding meets close tolerances. il Steel 145:117 Ag 17 '59

Costly aluminum plates reclaimed by belt grinder. il Steel 145:110 Jl 13 '59

Effects of operating variables on abrasive belt life. J. M. Pitblado. il Tool Eng 41: 113-16 O '58

Faster precision grinding with belts. il Mill & Factory 64:106-7 Ja '59

Four new methods for shaping new materials; electrical discharge machining, ultra high speed machining. Chem-Mill process, abrasive belt machining. R. R. Dobson. S A E J 67:80-1 F '59

Machining with coated abrasive belts. M. M. Gilman. diags Automotive Ind 120:70-1 F 15 '59

Paper mill roll grinding by the abrasive belt method. J. Burroughs. diags Tappi 42:sup 147A-8A S '59

Revolving drum saves abrasive belts; German grinder-polisher; illustration and drawings with text. Product Eng 30:85 Je 8 '59

Roughing and polishing metals with abrasive belts; data sheet. diags Metal Prog 76: 96B-96D S '59

Surfacing of zirconium alloy sheet by abrasive belt grinding; abstract. H. N. Dyer and R. A. Leggett. il Metal Prog 76:154+ S '59

Timed pneumatic system improves ground finish. E. Moldovan. il diag Ap Hydraulics & Pneumatics 12:112-13 My '59

Wet-belt grinding. il Mod Plastics 36:127+ My '59

ABRASIVES

Abrasive sheets and belts. L. F. Spencer. Metal Finishing 57:52-7 F '59

Attachment caresses surfaces to a controlled finish. il Steel 145:110-12 Jl 27 '59

Barrel finishing for plating. M. M. Maynes. il Plating 46:36-40 Ja '59

Barrel finishing; what it does to service life. L. P. Tarasov. il Am Mach 103:98-100 F 9 '59

Barrel finishing with specific-shape abrasive media. D. Mosher and others. diags Tool Eng 42:81-4 F '59

Cutting with abrasives. R. N. Perry, jr. il Plant Eng 12:100-2 D '58

Film proves abrasive wheels cut chips. il Am Mach 102:85 O 6 '58

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- Improve fatigue strength with abrasive tumbling. Iron Age 183:129-31 F 19 '59
- Mechanical abrasive-media finishing machine. il diag Mach 65:180 Ja '59
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- Microstoning generates precise finishes. R. Le Grand. il diag Am Mach 103:96-8 JI 27 '59
- New developments in metalworking equipment. il Mill & Factory 64:MW8 My '59
- Taft-Peirce microstoning attachments. il diags Mach 66:204+ O '59
- Wear of abrasives in grinding. G. L. Goepfert and J. L. Williams. bibliog il Mech Eng 81:69-73 Ap '59; Discussion. 81:86-7 S '59

See also

- Abrasive belts
Metal finishing
Polishing
Polishing materials

ABSENTEEISM (labor)

- How to control absenteeism. D. D. McConkey. Mill & Factory 64:87-90 Mr '59

ABSOLUTE zero

- Research near absolute zero. il Engineering 186:678-80 N 21 '58

ABSORBENTS

- Absorbance corrections for finite slit width with nonuniform absorbents. E. Back and others. bibliog Anal Chem 30:1875-7 N '58
- Analysis for industry; absorbents for nitrogen oxides in carbon and hydrogen analyses. A. M. G. Macdonald. bibliog Ind Chem 35:193-5 Ap '59

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- Infra-red absorptionmeter, using interference filters, for analysis of hydrogen fluoride in gaseous mixtures. J. A. Harrison and C. D. Reid. bibliog diag J Sci Instr 36:240-2 My '59
- Precision absorptiometry. C. M. Crawford. bibliog Anal Chem 31:343-8 Mr '59
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- Absorption of carbon dioxide by ethanolamines; abstract. R. Koch. Ind Chem 35:201-2 Ap '59
- Absorption of oxygen from air bubbles in water. W. W. Eckenfelder, jr. bibliog Am Soc C E Proc 85 [SA 4 no 2090]:89-99 JI '59
- Absorption of radiant heat by fire-fighting foam. P. H. Thomas. diag J Ap Chem 9:265-8 My '59
- Apparatus for measuring the rate of absorption of a bubble in glass. C. H. Greene, and R. F. Gaffney. diags Am Cer Soc J 42:271-5 Je 1 '59
- Cyanine dyes; absorption of cyanines derived from 2-methyl-8H-indeno[1,2-d]thiazole. R. H. Sprague and G. de Stevens. bibliog Am Chem Soc J 81:3095-8 Je 20 '59
- Gas purification; absorption of water by dehydrating solutions. A. L. Kohl and F. C. Riesenfeld. flow diag diag Chem Eng 66:159-62 Je 15 '59
- Gas purification; sulfur dioxide removal by liquid absorption. A. L. Kohl and F. C. Riesenfeld. flow diags diag Chem Eng 66:147-51 Je 15 '59
- Gas purification; water as an absorbent for gas impurities. A. L. Kohl and F. C. Riesenfeld. flow diag diag Chem Eng 66:143-7 Je 15 '59
- Interfacial resistance in gas absorption. P. Raimondi and H. L. Toor. bibliog flow diag diags A I Ch E J 5:86-92 Mr '59
- Interfacial resistance in the absorption of oxygen by water. S. H. Chiang and H. L. Toor. bibliog A I Ch E J 5:165-8 Je '59
- Oxygen absorption characteristics of inhibited transformer oils. L. Massey and A. C. M. Wilson. bibliog il diag Inst Pet J 44:336-56; Discussion. 367-77 O '58
- Phase equilibrium at the gas-liquid interface during absorption. L. E. Scriven and R. L. Pigford. bibliog flow diag il diags A I Ch E J 4:439-44 D '58
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- Recovery of uranium hexafluoride vapors; absorption in a fluidized bed of uranium tetrafluoride. J. L. Powell and others. diag Ind & Eng Chem 51:919-20 Ag '59
- Selective absorption is the best way to get rid of acetylene in ethylene. Chem & Eng N 37:46 Je 1 '59
- Steady state absorption of a sparingly soluble gas in an agitated tank with simultaneous irreversible first-order reaction. E. N. Lightfoot. bibliog A I Ch E J 4:499-500 D '58
- Study of the relationship between dye absorption and cotton fiber properties at equilibrium. P. N. Pal and R. M. Esteve, jr. bibliog Textile Res J 29:811-15 O '59
- Study the kinetics and possible mechanisms for improved nitrogen oxide absorption in an agitated reactor. M. S. Peters and E. J. Koval. bibliog Ind & Eng Chem 51:577-80 Ap '59
- Unit operations in chemical engineering; absorption and humidification. C. Y. Wen and M. Leva. bibliog Ind & Eng Chem 51:337-9 pt 2 Mr '59
- Which acetylene removal scheme is better? absorption versus hydrogenation. W. H. Stanton. flow diags diag Pet Refiner 38:177-80 My '59
- See also
- Silica gel
- Sound—Absorption

ABSORPTION (physiology)

- Absorption of vitamin A in dogs following cholecystonephrostomy. M. M. Kaser and others. bibliog J Nutrition 66:35-44 S '58
- Effect of antibiotics on the gastrointestinal absorption of calcium and magnesium in the rat. F. W. Heggeness. bibliog J Nutrition 68:573-82 Ag '59
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- Effect of D-sorbitol on absorption of vitamin B₁₂ by human subjects able to produce intrinsic factor. V. Herbert and others. bibliog Am J Clinical Nutrition 7:325-7 My '59
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- Influence of D-sorbitol on absorption of vitamin B₁₂ by patients with pernicious anemia and achlorhydria. B. Chow and others. bibliog Am J Clinical Nutrition 7:328-30 My '59
- Mechanism of cholesterol absorption. C. R. Treadwell and others. bibliog diag Am Oil Chem Soc J 36:107-11 Mr '59
- Percutaneous absorption; abstract. Drug & Cosmetic Ind 83:515 O '58
- Role of bile in calcium absorption. F. W. Lengemann and J. W. Dobbins. bibliog J Nutrition 66:45-54 S '58
- Site of action of lactose in the enhancement of calcium utilization. F. W. Lengemann. bibliog J Nutrition 69:23-7 S '59
- Studies on the enhancement of radiocalcium and radiostrontium absorption by lactose in the rat. F. W. Lengemann and others. bibliog J Nutrition 68:443-56 JI '59
- Studies on the role of intrinsic factor in vitamin B₁₂ absorption, transport, and storage. V. Herbert. bibliog diags Am J Clinical Nutrition 7:433-43 JI '59
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- Vitamin B₁₂ absorption in pyridoxine-deficient rats. S. D. J. Yeh and B. F. Chow. bibliog Am J Clinical Nutrition 7:426-32 JI '59
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- Absorber-tray effectiveness in recovery of propane. E. G. Ragatz. Oil & Gas J 56:117-20 N 10 '58
- Effect of ammonia absorption on the wetted area of a packed tower; abstract. W. S. Norman and B. Solomon. Ind Chem 35:141 Mr '59
- Ethylene purification; demethanization. J. R. Fair and others. bibliog flow diag diags Chem Eng Prog 54:39-46 D '58

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Control

Footvalves for downcomers prevent tower flooding. H. H. Sun. diags Chem Eng 66:162 JI 13 '59

Infrared analyzer controls absorber. G. M. Hicks and D. D. Livingstone. bibliog flow diag diags Pet Refiner 38:183-6 My '59

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Design of cosmetic sun screens. S. I. Kreps. diags Am Perfumer & Aromatics 74:29-32+ O '59

Determination of alkyl aryl sulfonates by ultraviolet absorption. R. M. Kelley and others. bibliog il diag A S T M Bul p70-3 Ap '59

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Infrared absorption and photoconductivity in irradiated silicon. H. Y. Fan and A. K. Ramdas. bibliog J Ap Phys 30:1127-34 Ag '59

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Gamma rays—Absorption
Spectrophotometry
X rays—Absorption

ABSORPTION spectra. See Spectrum—Absorption spectra

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ACCELERATORS (particles)

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Amateur scientist, how to make an electrostatic machine to accelerate both electrons and protons. C. L. Stong. diags Sci Am 200:138-42+ Ja '59

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Falls
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Trauma

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Citric acid
Fumaric acid
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Maleic acid
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Aluminum works

Animal buildings

Apartment houses

Atomic research laboratories

Auditoriums

Bank buildings

Churches

College buildings

Data processing service centers

Factories

Garment factories

Hospitals

Hotels

Industrial buildings

Insurance company buildings

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Gold alloys
Gun metal
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Iron alloys
Lead alloys
Lithium alloys
Magnesium alloys
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Nickel alloys
Niobium alloys
Palladium alloys
Permalloy
Potassium alloys
Rhenium alloys
Rhodium alloys
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Sodium alloys
Steel alloys
Stellite
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AMATEUR moving pictures. See Moving pictures, Amateur

AMATEUR radio operators. See Radio operators, Amateur

AMATEUR scientists. See Scientists, Amateur

AMATITLAN, Lake

Underwater archaeology in the Maya highlands. S. F. Borhegyi. il map diags Sci Am 200:100-2+ Mr '59

AMBULANCES

Ambulance as an industrial tool. il Safety Maint 117:32-3+ Je '59
Disaster ambulance; mobile first aid station. T. F. Nevins, jr. il Ind Med 27:641-2 D '58

AMERICAN architecture. See Architecture, American

AMERICAN association of oilwell drilling contractors

Annual meeting, 18th, Dallas, Oct. 1-3. Pet Eng 30:B 126-7 N '58

AMERICAN association of petroleum geologists

Annual meeting, Dallas, March 16-19; abstracts of papers. Am Assn Pet Geologists Bul 43:1765-81 Jl '59

Annual meeting, 44th, Dallas, March 16-19; reports. Am Assn Pet Geologists Bul 43:1437-89 Je '59

Constitution and by-laws. Am Assn Pet Geologists Bul 43:2250-60 S '59

Membership directory. Am Assn Pet Geologists Bul 43:1-218 pt 2 Mr '59

Pacific section meeting, Nov. 6-7; abstracts of papers. Am Assn Pet Geologists Bul 43:252-60 Ja '59

AMERICAN association of physics teachers

Annual meeting, 28th, New York, Jan. 28-31; with abstracts of papers. Am J Phys 27:441-53 S '59

Summer meeting, Boulder, June 25-27; with abstracts of papers. Am J Phys 27:64-7 Ja '59

AMERICAN association of state highway officials

Annual meeting, 44th, San Francisco, Dec. 1-5. Eng N 161:21-2 D 11 '58; Roads & Sts 102:72+ Ja; 66+ F '59

Man who gets things done; David H. Stevens. AASHO's new president. Eng N 163:55-6 O 22 '59

AMERICAN association of textile chemists and colorists

Address before the Southeastern section. G. O. Linberg. Am Dyestuff Rep 47:925-6+ D 29 '58

AATCC looks ahead. C. A. Sylvester. Am Dyestuff Rep 48:43-4 Ag 10 '59

Annual meeting, 37th, Chicago, Oct. 30-Nov. 1. Am Dyestuff Rep 47:863-72 D 1 '58

Annual meeting, 37th, Chicago, Oct. 30-Nov. 1; program, officers, committee members; abstracts of papers. Am Dyestuff Rep 47:701-26 O 20 '58

Annual meeting, 37th, Chicago; with abstracts of papers. Textile Ind 123:93-7 Ja '59

Council report; 211th meeting, Charlotte, N.C. Sept. 19. Am Dyestuff Rep 47:738-9 O 20 '58

Council report; 213th meeting, New York, Jan. 30. Am Dyestuff Rep 48:53-7 F 23 '59

Council report; 214th meeting, New York, April 3. Am Dyestuff Rep 48:56-8 My 4 '59

Importance of AATCC to the textile industry and the consumer. G. H. Johnson. Am Dyestuff Rep 48:23-4 Ja 12 '59

Meeting, 215th, Montreal, May 29; council report. Am Dyestuff Rep 48:39-40 Ag 24 '59

National convention and exhibit, Washington, Oct. 7-9; list of exhibitors, floor plan. Mod Textiles Mag 40:61-3 O '59

AMERICAN association of textile chemists and colorists—Continued

National meeting, 38th, Washington, Oct. 7-10; with list of exhibitors, floor plan; abstracts of papers. *Am Dyestuff Rep* 48:81-125 S 21 '59
 President's address. G. O. Linberg. *Am Dyestuff Rep* 47:787-8 N 17 '58

Committee on research

Meeting, 195th, Philadelphia, May 22; with text of reports. *Am Dyestuff Rep* 47:631-7 S 8 '58
 Technical committee on research, 196th meeting, Charlotte, N.C. Sept. 20. *Am Dyestuff Rep* 47:740+ O 20 '58
 Technical committee on research, 197th meeting, New York, Jan. 19. *Am Dyestuff Rep* 48:35-40+ Mr 9 '59
 Technical committee on research, 198th meeting, New York, April 2. *Am Dyestuff Rep* 48:51-5 My 18 '59

AMERICAN cancer society

Hitch your mousetrap to a cause. D. L. Harrington. *il Water Works Eng* 112:300-1 Ap '59

AMERICAN ceramic society

Annual meeting, 61st, Chicago, May 17-21; awards, fellows, officers. *Am Cer Soc Bul* 38:309-28 Je 15 '59
 Annual meeting, 61st, Chicago, May 17-21; program and abstracts of papers. *Am Cer Soc Bul* 38:155-7+ Ap 15 '59
 Annual meeting, 61st, Chicago, May 17-21; report on the honors and awards. *Glass Ind* 40:300+ Je '59
 Annual report of sections' activities. *Am Cer Soc Bul* 38:78-83+ F 15 '59
 Audit report, 1958. *Am Cer Soc Bul* 38:424 Ag 15 '59
 Ceramics, the oldest art and newest science. S. W. Bradstreet. *Am Cer Soc Bul* 37:510-12 D 15 '58
 How honors are thrust upon you. *Am Cer Soc Bul* 38:145 Ap 15 '59
 Meet the Pacific Northwest section; thumbnail biographies of some of the members. *Cer Ind* 73:38-41 O '59
 Membership roster. *Am Cer Soc Bul* 38:511-21+ O 15 '59
 Pacific Coast regional meeting, 11th, Los Angeles, Oct. 22-24. *Am Cer Soc Bul* 37:516 D 15 '58; *Cer Ind* 71:68 D '58
 Pacific Coast regional meeting, 12th, Seattle, Oct. 15-17; program. *Cer Ind* 73:36-7 O '59
 Pacific Coast regional meeting, 12th Seattle, Oct. 15-17; program with abstracts of papers. *Am Cer Soc Bul* 38:475-9 S 15 '59
 President's report to the board of trustees and committee reports for 1958-59. *Am Cer Soc Bul* 38:426-8 Ag 15 '59
 Society's growth passes 7000 total. *Am Cer Soc Bul* 37:513 D 15 '58

Basic science division

Fall meeting, Dayton, Ohio, Sept. 29-30; abstracts of papers. *Am Cer Soc Bul* 37:514-15 D 15 '58

Design division

Design division meeting; abstracts of papers. *Cer Ind* 73:49-51+ Ag '59

Electronics division

Annual meeting, 1st, Pittsburgh, April 28-29; with text of five papers. *Am Cer Soc J* 41:483-506 pt 2 N 1 '58

Glass division

Annual meeting, 61st, Chicago, May 17-21; abstracts of papers. *Glass Ind* 40:353-6+ J1 '59
 Fall meeting, Bedford Springs, Pa. Oct. 16-17; abstracts of papers. *Glass Ind* 39:590-3+ N '58
 Fall meeting, Wernersville, Pa. Oct. 15-16; program. *Am Cer Soc Bul* 38:486-7 S 15 '59
 Meeting, Bedford Springs, Pa. *Cer Ind* 71:74-5 D '58
 Pacific Coast regional meeting, 11th, Los Angeles, Oct. 22-24; abstracts of papers. *Glass Ind* 39:647-8+ D '58

Materials and equipment division

Joint meeting with White wares division, Bedford Springs, Pa. Sept. 30-Oct. 3; program. *Am Cer Soc Bul* 38:481+ S 15 '59

Whiteware division

Fall meeting, Bedford Springs, Pa. *Cer Ind* 71:79-81 D '58
 Joint meeting with Materials and equipment division, Bedford Springs, Pa. Sept. 30-Oct. 3; program. *Am Cer Soc Bul* 38:481+ S 15 '59

AMERICAN chemical society

Advisory board members named. *Chem & Eng N* 36:77-80+ D 29 '58
 ACS finances being restyled. *Chem & Eng N* 37:108-9 Ap 20 '59
 American chemical society officers, committees, and chapters of student affiliates. *Chem & Eng N* 37:75-82 F 23 '59
 Board of directors minutes, Dec. 6-7. *Chem & Eng N* 37:94-108 Ja 19 '59
 Board of directors minutes; Boston, April 5-10. *Chem & Eng N* 37:54-61 My 25 '59
 Board of directors minutes, June 6, and reports of committees. *Chem & Eng N* 37:69-73 J1 20 '59
 Campaign outlook good; C&EN interview on building fund with E. R. Weidlein. *Chem & Eng N* 37:80+ F 16 '59
 Candidates for offices. *Chem & Eng N* 37:104-5+ O 26 '59
 Council policy committee minutes and council minutes. Boston, April 6-7. *Chem & Eng N* 37:62-4+ My 25 '59
 Dateline, Boston; role of American chemical society news service. *Chem & Eng N* 37:91-8 Ap 27 '59
 Have your say; there are many ways members can express their opinions and exert their influence. *Chem & Eng N* 37:68-73 O 5 '59
 National meeting, 135th, Boston, April 5-10; with program and abstracts of papers. *Chem & Eng N* 37:66-96+ Mr 2; 21-4, 32-5, 41-7+ Ap 13; 21-4, 29-30+ Ap 20 '59
 National meeting, 136th, Atlantic City, N.J. Sept. 13-18; with program and abstracts of papers. *Chem & Eng N* 37:54-107 Ag 10; 19-22+ S 21; 24-6+ S 28 '59
 Officers, committees, and chapters of student affiliates. *Chem & Eng N* 37:61-8 Ag 24 '59
 Official reports for 1958. *Chem & Eng N* 37:45-70 Mr 9 '59
 Progress report number 32 of the committee on professional training. *Chem & Eng N* 37:109-14 Mr 30 '59
 Projected ACS divisional programs. *Chem & Eng N* 37:84-9 O 19 '59
 Projected divisional programs. *Chem & Eng N* 37:91-102 My 11 '59
 Society streamlines communications. *Chem & Eng N* 37:100-2 O 26 '59
 Southeastern regional meeting, Gainesville, Fla. Dec. 11-13; program. *Chem & Eng N* 36:96+ N 10 '58
 Southeastern regional meeting, Richmond, Va., Nov. 5-7; program. *Chem & Eng N* 37:89-90+ O 19 '59
 Southwest regional meeting, San Antonio, Tex. Dec. 4-6; program. *il Chem & Eng N* 36:84+ N 17 '58
 Special summary report; committee report on civil defense. *Chem & Eng N* 37:76-80 O 19 '59

Chemical abstracts service

Career opportunities. *il Chem & Eng N* 37:16 pt 2 Ja 26 '59
 Research expansion at the Chemical abstracts service. G. M. Dyson. *diag Chem & Eng N* 37:128-31 S 7 '59

Division of agricultural and food chemistry

ACS Division of agricultural and food chemistry; a historical review. L. E. Clifcorn. *J Agri & Food Chem* 7:544-6 Ag '59

Division of analytical chemistry

Division of analytical chemistry completes 20 years of activity. *il Anal Chem* 31:sup 17A-20A+ Ap '59
 Meeting, Boston, April 6-10; program. *Anal Chem* 31:sup 33A-6A Mr '59
 National meeting, 136th, Atlantic City, Sept. 13-18; program. *Anal Chem* 31:sup 33A-7A Ag '59

Division of paint, plastics and printing ink chemistry

Annual meeting, 134th, Chicago, Sept. 7-12; abstracts of papers of interest to rubber industry. *Rubber Age* 84:298-9 N '58

Division of polymer chemistry

Annual meeting, 134th, Chicago, Sept. 7-12; abstracts of papers of interest to rubber industry. *Rubber Age* 84:298-9 N '58

Division of rubber chemistry

Meeting, 75th, Los Angeles, May 13-15; program and abstracts of papers. *Rubber Age* 85:93-102 Ap; 460-2 Je '59; *Rubber World* 140:86-95 Ap; 439-44+ Je '59
 Officers; annual report 1958; future meetings; sponsored rubber groups. *Rubber Chem & Tech* 31:sup iii-x D '58

AMERICAN concrete institute

- American concrete institute dedicates new headquarters. *il A S T M Bul* p28 F '59
- Annual convention, 55th, Los Angeles, Feb. 23-26; program. *Am Concrete Inst J* 30:sup3-6 N '58
- Annual meeting, 55th, Los Angeles, Feb. 23-26. *Eng N* 162:27 Mr 5 '59; *Am Concrete Inst J* 30:sup3-8 Ap '59; *Civil Eng* 29:296 Ap '59
- Annual report. *Am Concrete Inst J* 30:sup3-5 Mr '59
- Concrete; milestones of technology as reviewed at the dedication of the ACI headquarters building. R. F. Legget, bibliog *il Am Concrete Inst J* 30:925-33 Mr '59
- Dedicate new ACI headquarters, an unusual building of concrete. *il Concrete* 66:29-30 N '58
- Regional convention, 11th, Detroit, Oct. 27-29. *Pit & Quarry* 51:73+ D '58
- Regional meeting, 11th, Detroit, Oct. 27-29; abstracts of papers. *Am Concrete Inst J* 30:sup 13-15 D '58
- Regional meeting, 12th, Mexico city, Nov. 2-5; with program. *Am Concrete Inst J* 31:sup 1-4 S '59
- AMERICAN council to improve our neighborhoods**
- ACTION on rental housing. *Arch Forum* 110:120-1+ Mr '59
- ACTION's rousing. Mr Rouse. *Arch Forum* 110:128-9+ My '59
- AMERICAN die casting institute**
- Annual meeting, Chicago, Sept. 10-11. *Mod Metals* 14:68+ S '58; *Foundry* 86:116+ N '58
- AMERICAN electroplaters society**
- AES research program; progress report and summaries of research projects. *Plating* 46:361-8+ Ap '59
- Annual convention and exposition, Detroit, June 15-19; program and list of exhibitors. *Iron Age* 183:123-4 Je 4 '59
- Annual convention and Industrial finishing exposition, Detroit, June 15-19. *Am Mach* 103:80 Je 29 '59
- Annual report, golden jubilee year. *Plating* 46:665-78 Je '59
- Branch delegates, boards and committees, branch directory, 1958-59. *Plating* 46:679-87 Je '59
- Constitution and by-laws as of June 18, 1959. *Plating* 46:1066-75 S '59
- Financial report, fiscal year ended June 30. *Plating* 46:1076-9 S '59
- Golden jubilee convention and industrial finishing exposition, Detroit, June 15-19. *Metal Finishing* 57:50-8+ Ag '59; *il Plating* 46:937-50 Ag '59
- Golden jubilee convention and Industrial finishing exposition, Detroit and Oak Park, Mich. June 15-19; with program, officers, chairmen, abstracts of papers and list of exhibitors. *Plating* 46:691-704, 841-7 Je-Jl '59; *Metal Finishing* 57:76A-76U Je '59
- Kaleidoscope of first half century. J. P. Nichols. *Plating* 46:650-64 Je '59
- AMERICAN foundrymens society**
- Annual congress and castings show, Chicago, April 13-17; program, list of exhibitors, committee members, awards. *Foundry* 87:130-43 Ap '59
- Castings congress, 63d, and foundry show, Chicago, April 13-17; with abstracts of papers. *Foundry* 87:107-15, 181-2+ My; 185-6+ Je '59
- AMERICAN gas association**
- A.G.A. nominates for 1959-1960. *Am Gas Assn Mo* 41:3-4 Jl-Ag '59
- A.G.A. wins highest public relations award. *Am Gas Assn Mo* 40:17-18 N '58
- Annual accident prevention conference, 11th, Atlanta, Sept. 15-16. *Am Gas Assn Mo* 41:6-7+ O '59
- Annual meeting, 40th, Atlantic City, Oct. 13-15. *Am Gas Assn Mo* 40:2-39 N '58; *Gas Age* 122:35-54 N 13; 33-5 N 27 '58
- Annual meeting, 41st, Chicago, Oct. 5-7; program. *Am Gas Assn Mo* 41:3-4+ S '59
- Annual meeting, 41st, Chicago, Oct. 5-7; program, directors, section officers. *Gas* 35:109-12 O '59
- Annual transmission conference, Dallas, May 18-19. *Am Gas Assn Mo* 41:42-3+ Jl-Ag '59
- General management section 5th annual meeting, Cleveland, March 2-4. *Am Gas Assn Mo* 41:21-3+ Ap '59; *Gas Age* 123:17-18 Ap 16 '59
- Operating section distribution conference, Cincinnati, April 6-9; with abstracts of papers. *Am Gas Assn Mo* 41:37-41 My '59; *Gas Age* 123:17-26+ Ap 30 '59

- Operating section production conference, Rochester, May 25-27. *Am Gas Assn Mo* 41:39-41+ Jl-Ag '59
- Purchasing and stores committee, annual meeting, Cleveland, March 2-4. *Am Gas Assn Mo* 41:29-31 My '59
- Research and utilization conference, 14th, Cleveland, May 5-7. *Am Gas Assn Mo* 41:6-9+ Je '59
- Sales conference on industrial and commercial gas, Philadelphia, April 7-9. *Am Gas Assn Mo* 41:32-6 My '59
- Today at the A.G.A. J. F. Ebdon and W. T. Harper. *il Gas* 35:77-108 O '59
- What A.G.A. offers the accountant. C. D. Orcasek. *Am Gas Assn Mo* 41:19-20 Ap '59

AMERICAN gear manufacturers association

- Annual meeting, 43d, Hot Springs, Va. June 1-3. *Am Mach* 103:116 Je 15 '59; *Automotive Ind* 121:51+ Jl 1 '59; *Mach* 65:173 Jl '59

AMERICAN industrial hygiene association

- Formative days, 1938-1939. *Ind Med* 28:407-15 S '59
- Role of the professional society in industrial hygiene. C. R. Williams. *Ind Med* 28:320-1 Jl '59

AMERICAN institute of architects

- Annual meeting, 91st, New Orleans, June 22-26. *Eng N* 163:25 Jl 2 '59; *Arch Forum* 111:7 Ag '59; *Arch Rec* 126:9-10+ Ag '59; *Prog Arch* 40:76-7 Ag '59

Building products registry service

- Cites advantages of new products survey. H. J. Rosen. *Prog Arch* 40:9 My '59

AMERICAN institute of chemical engineers

- Annual meeting, Cincinnati, Dec. 7-10; program. *Chem Eng Prog* 54:134-6+ O '58
- Annual meeting, San Francisco, Dec. 6-9; program. *Chem Eng Prog* 55:142+ O '59
- Meeting, Kansas City, May 18-20; program. *Chem Eng Prog* 55:126+ Mr '59
- Meeting, St Paul, Sept. 27-30; program. *Chem Eng Prog* 55:130+ Jl '59
- National meeting, Atlantic City, March 15-18; program. *Chem Eng Prog* 55:100+ Ja '59
- What's the A.I.Ch.E. doing for you? I. Leibson and others. *Chem Eng Prog* 55:73-5 Jl '59

AMERICAN institute of electrical engineers

- Accountants' report. *Elec Eng* 78:858-9 Ag '59
- AIEE fellows elected. *Elec Eng* 78:706-8 Je '59
- AIEE fellows elected. *Elec Eng* 78:958-64 S '59
- Design and application of ac mining equipment conference; abstracts of papers. *Coal Age* 64:60-2 Mr '59
- Fall general meeting, Pittsburgh, Oct. 26-31; program. *Elec Eng* 77:969-72 O '58
- Institute and electrical insulation. L. F. Hickernell, bibliog *Elec Eng* 77:1097-9 D '58
- Institute and its operations. L. F. Hickernell, bibliog map *Elec Eng* 78:672-6, 728-35, 832-8 Je-Ag '59
- Institute and research. L. F. Hickernell, bibliog *Elec Eng* 78:292-6 Ap '59
- Institute formed 75 years ago today. L. F. Hickernell. *Elec Eng* 78:806-7 Ag '59
- Institute's 75th anniversary celebration. L. F. Hickernell. *Elec Eng* 77:889-91 O '58
- Institute's 75th year. L. F. Hickernell. *Elec Eng* 78:884-9 S '59
- Officers, departments, and committees for 1959-60. *Elec Eng* 78:980-8 S '59
- Pacific general meeting, Sacramento, Aug. 19-22. *Elec Eng* 77:1047-9 N '58
- Report of the board of directors, May 1, 1958-April 30, 1959. *Elec Eng* 78:856-7 Ag '59
- Report on the revision of the AIEE standards manual. *Elec Eng* 78:207-12 Mr '59
- Role of AIEE in electrical insulation. L. J. Berberich. *Elec Eng* 77:1099-101 D '58
- Standardization: past and present. E. B. Paxton. *il Mag of Stand* 30:268-70 S '59
- Summer and Pacific general meeting, Seattle, June 21-26; with abstracts of papers. *Elec Eng* 78:932-46 S '59
- Summer and Pacific meeting, Seattle, June 21-26; abstracts of papers. *Elec World* 152:86-9+ Jl 20 '59
- Two new medals announced. *Elec Eng* 78:179 F '59
- Winter general meeting, New York. *Elec World* 151:62-3 F 16 '59
- Winter general meeting, New York, abstracts of papers. *Control Eng* 6:32+ Mr '59
- Winter general meeting, New York; abstracts of papers. *Elec World* 151:47-56 Mr 2 '59
- Winter general meeting, New York, Feb. 1-6; program and abstracts of papers. *Elec Eng* 78:84-7, 363-7, 374-83 Ja, Ap '59

AMERICAN institute of mining, metallurgical and petroleum engineers
 Annual meeting, 87th, San Francisco, Feb. 15-19; with abstracts of papers of interest to producers of industrial minerals. Pit & Quarry 51:84-9 My '59
 Annual meeting, San Francisco, Feb. 15-19. Eng & Min J 160:89-92+ Ap '59
 Annual meeting, San Francisco, Feb. 15-19. Rock Prod 62:158+ My '59
 Map, location, and identification of local sections; with name and address of the local section secretary or secretary-treasurer. Min Eng 10:812-13 JI '58; Same. J Metals 10:686-7 O '58
 You and SME membership. il map diags Min Eng 11:392-404 Ap '59

Council of education

Bylaws approved Feb. 16, 1958. Min Eng 11:79-80 Ja '59

Metallurgical society

Annual meeting, San Francisco, Feb. 15-19; program and abstracts of papers. J Metals 11:57-76 Ja '59
 Annual meeting, San Francisco, Feb. 15-19. J Metals 11:282-6 Ap '59
 Annual report of the secretary. J Metals 11:155-6 Mr '59
 Fall meeting, Chicago, Nov. 2-5; program and abstracts of papers. J Metals 11:567-602 S '59
 Fall meeting, Cleveland, Oct. 26-30. J Metals 11:20-2 Ja '59
 Membership directory, 1959. J Metals 11:sup 1-90 JI '59
 1958 income survey of members of the Metallurgical society. J Metals 11:386-90 Je '59
 Technical committees. J Metals 11:43-7 Ja '59

Society of mining engineers

Annual meeting, San Francisco, Feb. 15-19; program, abstracts of papers. Min Eng 10:1241-52; 11:33-44 D '58-Ja '59
 Membership directory, 1959. J Pet Tech 11:sup 1-121 Je '59
 Membership directory, 1959. Min Eng 11:sup 1-148 JI '59

Society of petroleum engineers

Annual fall meeting, 34th, Dallas, Oct. 4-7; program and abstracts of papers. J Pet Tech 11:47-59 S '59

AMERICAN institute of nutrition

Annual meeting, 22d, Philadelphia, April 13-18; proceedings. J Nutrition 66:139-62 S '58
 Annual meeting, 23d, Atlantic City, N.J., April 11-13; proceedings. J Nutrition 69:95-103 S '59

AMERICAN institute of physics

Annual meeting of the Corporate associates, New York, Oct. 28. Phys Today 11:38-9 D '58
 Annual report, 1958. Phys Today 12:18-25 Je '59

AMERICAN institute of plant engineers

AIPE adds new chapters. Plant Eng 13:140-1 My '59
 Annual meeting, Cleveland, Jan. 25. Plant Eng 13:126-7 Mr '59
 Hawaii newest chapter; other activities. Plant Eng 13:154+ S '59

AMERICAN institute of steel construction

National engineering conference, 11th, Birmingham. Eng N 162:24 Ap 23 '59

AMERICAN institute of wholesale plumbing and heating supply associations

Annual meeting, New Orleans. Dom Eng 192:88+ D '58

AMERICAN machine tool distributors association

Annual meeting, 34th, Boston, Oct. 16-17; abstracts of papers. Am Mach 102:100 N 3 '58; Mach 65:159-60 D '58
 Spring meeting, Washington, March 18-19. Am Mach 103:127 Ap 6 '59

AMERICAN material handling society

AMHS, first ten years. Mod Materials Handling 14:101-14 Je '59
 Four new regional vice presidents elected. Mod Materials Handling 14:129-30 S '59
 Tenth anniversary banquet, Cleveland, June 11. Mod Materials Handling 14:113-16 Ag '59

AMERICAN medical association

Annual institute, 2d, Chicago, Aug. 27-28. Drug & Cosmetic Ind 83:467 O '58

AMERICAN mining congress

Annual convention, San Francisco, Sept. 22-26; with abstracts of papers. Pit & Quarry 51:78-81 N '58; Rock Prod 61:106+ D '58

Annual meeting, New York, Dec 1. Min Cong J 45:21-4 Ja '59
 Coal division annual meeting, Cleveland, May 11-14; abstracts of papers. Coal Age 64:120-6+ Je '59; Min Cong J 45:69-81 Je '59
 Coal division 24th annual conference, Pittsburgh, Nov. 14th; with abstracts of papers. Min Cong J 45:57-60 Ja '59
 Directors. Min Cong J 45:54-5 Ag '59
 Industrial minerals producers meeting, Cleveland. Rock Prod 62:83+ JI '59
 Metal mining and industrial minerals convention, Denver, Sept. 14-17; program. Min Cong J 45:44-53+ Ag '59
 1959 coal show, Cleveland, May 11-14; program, list of exhibitors. Coal Age 64:133-54+ Ap '59; Min Cong J 45:66-71 Mr; 68-89 Ap '59

Western division

Metal mining and industrial minerals convention, San Francisco, Sept. 22-25; with declaration of policy and abstracts of papers. Min Cong J 44:46-69 N '58

AMERICAN museum of atomic energy

Only American museum of its kind explains the atom in layman's terms. il Elec Eng 78:781-3 JI '59

AMERICAN national exhibition in Moscow

Geodesic dome big attraction at Moscow fair. il Mod Metals 15:118 S '59
 Geodesic dome erection attracts USSR attention; American national exhibition, Moscow. il Plant 20:25-7 Ag '59
 Plastics pavilion in Moscow. il Plastics World 17:16 Je '59
 Reinforced plastic pavilions. il Plastics Tech 5:58-9 Je '59
 Undulating umbrellas designed for Moscow trade fair. il Prog Arch 40:69 Je '59
 U.S. aluminum dome goes up in Moscow. il Light Metal Age 17:18-19 Je '59
 U.S. exhibition in Moscow; large design challenge. il plan Arch Rec 125:10 Ap '59
 US gives Moscow something to talk about; American national exhibition, Sokolniki park. il Eng N 162:24-5 Je 25 '59
 U.S. in Moscow; U.S. prepares exhibit to reflect many facets of American life. E. Mickel. Arch Rec 125:44 Ap '59

AMERICAN oil chemists society

Anniversary meeting, 50th, New Orleans, April 20-22. Am Oil Chem Soc J 36:sup20-2+ Je '59
 Fall meeting, 33d, Los Angeles, Sept. 28-30; program. Am Oil Chem Soc J 36:sup 18-19+ Ag '59
 Golden anniversary meeting, New Orleans, La. April 20-22; program. Am Oil Chem Soc J 36:sup 13 Mr '59
 President looks at the 50th year. J. C. Konen. Am Oil Chem Soc J 36:sup4-6 My '59
 Report of the cellulose yield committee, 1958-59. Am Oil Chem Soc J 36:180 Ap '59
 Report of the Smalley committee, 1958-1959. Am Oil Chem Soc J 36:260-1 Je '59
 Report of the spectroscopy committee, 1957-58. Am Oil Chem Soc J 35:593-6 N '58
 Report of the uniform methods committee. Am Oil Chem Soc J 36:114-15 Mr '59
 Report of the uniform methods committee, 1958-59. Am Oil Chem Soc J 36:352-4 Ag '59

Treasurer's report, 1958 and report of the advertising committee, 1958-1959. Am Oil Chem Soc J 36:sup 13-14 Je '59

AMERICAN ordnance association

Annual meeting, New York; abstracts of papers. Product Eng 29:22-3 D 15 '58

AMERICAN paper and pulp association

Annual convention, 82d, New York, Feb. 22-26. Inland & Am Ptr & Lithogr 143:120-1+ Ap '59
 Annual meeting, 82d, New York, Paper Ind 40:819-20+ Mr '59

AMERICAN petroleum institute

Annual meeting, 38th. Oil & Gas J 56:115-32 N 17 '58
 Division of refining, 24th midyear meeting, New York, May 27-29; program. Pet Refiner 38:258+ Mr '59
 Only the skilled can work; API's organization for training. Pet Eng 30:A25-7 N '58

AMERICAN photoengravers association

Annual convention, 62d, Cincinnati, Oct. 12-15. Inland & Am Ptr & Lithogr 142:114 N '58

AMERICAN power conference

Annual meeting, 21st, Chicago, March 31-April 2; program. Combustion 30:65-8 F '59; Elec Eng 78:259-60 Mr '59

- AMERICAN power conference—Continued**
 Annual meeting, 21st, Chicago, March 31-April 2; abstracts of papers. *Combustion* 30:49-52 My; 45-52 Je '59
 Annual meeting, 21st, Chicago, March 31-April 2; abstracts of papers. *Elec World* 151:50-3 Ap 27 '59; *Plant* 19:59-62 My '59; *Power Eng* 63:94-6+ My '59
- AMERICAN public health association**
 Annual meeting, 86th, St Louis; Laboratory section abstracts of papers. *Am J Pub Health* 49:684-90 My '59
 Annual meeting, 8th, Atlantic City, N.J. Oct. 19-23; program, list of exhibitors, nominations for section offices. *Am J Pub Health* 49:1194-257 S '59
 Balanced activities. *Am J Pub Health* 49:102-12 Ja '59
 Committees, 1958-1959. *Am J Pub Health* 49:376-401 Mr '59
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 Report of the chairman of the technical development board to the governing council, 1957-1958. M. M. Eliot. *Am J Pub Health* 49:96-101 Ja '59
- AMERICAN public power association**
 Annual meeting, 16th, Seattle, May 26-28. *Elec World* 151:92-3 Je 29 '59
 Engineering and operations workshop meeting. Springfield, Ill. Feb. 18-20. *Elec World* 151:66 Mr 16 '59
- AMERICAN public works association**
 Annual meeting, 64th, Kansas City, Mo. Sept. 28-Oct. 1. *Pub Works* 89:111-12+ N '58
 Annual meeting, 65th, Seattle, Sept. 20-23; program. *Pub Works* 90:137-8+ S '59
 News bulletins. Published in monthly numbers of *Public Works*
- AMERICAN pulp and paper mill superintendents association.** See *Paper industry management association*
- AMERICAN radio relay league**
 Look back and ahead at ARRL's propagation research project. M. P. Southworth. *il map Q S T* 43:48-9 Je '59
- AMERICAN road builders association**
 Annual meeting, 57th, Dallas, Jan. 19-22. *Civil Eng* 29:205-6 Mr '59; *Pit & Quarry* 51:152 Ap '59; *Roads & Sts* 102:112-13+ Mr '59
 National highway conference for county engineers and officials, Kiamesha Lake, N.Y. *Roads & Sts* 101:52+ D '58
- AMERICAN rocket society**
 Annual meeting, New York; abstracts of papers. *Product Eng* 29:19+ D 1 '58
 Fall meeting, Detroit; abstracts of papers. *Automotive Ind* 119:62+ O 15 '58
- AMERICAN society for engineering education**
 Annual meeting, 67th, Pittsburgh, June 15-19. *Mech Eng* 81:106-7 Ag '59
- AMERICAN society for metals**
 Dr Clarence H. Lorig; ASM picks a research scientist. *Iron Age* 182:165 O 16 '58
 New headquarters at Metals Park, Novelty, Ohio. *il Metal Prog* 76:64A-64D S '59
 Western metal congress. *Metal Prog* 75:sup 96F-96N Ap '59
- AMERICAN society for quality control**
 American society for quality control. G. R. Foster. *Mag of Stand* 30:106-9 Ap '59
 Annual meeting, 13th, Cleveland, May 24-28; with program, list of exhibitors. *Ind Quality Control* 15:24-9 Ap; 16:15-19+ Jl '59
 Annual report of the Board of directors. *Ind Quality Control* 16:7-12 O '59
 Annual report of the Board of directors, July 1957-June 1958. *Ind Quality Control* 15:21-6 O '58
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 Organization chart for 1959-60, and committee members. *Ind Quality Control* 16:33 S '59
 Professional engineering status for the quality control engineer; final report of special committee on professional development. *Ind Quality Control* 16:17-18+ O '59
- AMERICAN society for testing materials**
 ASTM and the critical data problem. *il A S T M Bul* p 16-19 F '59
 ASTM awards of merit, medals and awards. *A S T M Bul* p24-9 Jl '59
 ASTM books in 1958-59. *il A S T M Bul* p5-11 O '58
 ASTM called vortex of our institutions. N. C. Rockwood. *Rock Prod* 62:20+ F '59
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- ASTM in 1958.** *il A S T M Bul* p5-15 Ja '59
 Annual meeting of Committee D-12 on soaps and other detergents, New York, March 9-10. *Soap & Chem Spec* 35:58-9 Ap '59
 Annual meeting, 62d, Atlantic City; abstracts of papers of interest to the concrete industry. *Concrete* 67:28 S '59
 Annual meeting, 62d, Atlantic City; abstracts of papers on construction and road building. *Pit & Quarry* 52:100-3+ Ag '59
 Annual meeting, 62d, Atlantic City, June 21-26. *Eng N* 163:26 Jl 2 '59; *Mag of Stand* 30:244-5 Ag '59
 Annual meeting, 62d, Atlantic City, June 21-26; program and abstracts of papers. *A S T M Bul* p5-23 Ap '59
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 Impact of science on ASTM. K. B. Woods. *A S T M Bul* p9-11 Jl '59
 New division on materials sciences to be organized. *il A S T M Bul* p5 F '59
 Technical committee officers. *A S T M Bul* p 18-19 S '58
- Crude natural rubber subcommittee**
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 Highlights in the careers of new ASCE officers. *Civil Eng* 28:771-4 O '58
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 Meeting, Los Angeles. *Eng N* 162:28 F 19 '59
 Meeting, Los Angeles, Feb. 9-13; program and abstracts of papers. *Civil Eng* 29:35-42, 185-91 Ja, Mr '59
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 Professional citizenship; presidential address. F. S. Friel. *Civil Eng* 28:813-15 N '58
- Air transport division**
 Better airfields for bigger aircraft; mission of Air transport division. J. M. Kyle, jr. *Civil Eng* 29:307 My '59
- AMERICAN society of engineering education**
 Annual meeting, 67th, Pittsburgh, June 15-19. *Civil Eng* 29:595 Ag '59
- AMERICAN society of heating and air conditioning engineers** (now American society of heating, refrigerating and air conditioning engineers)
 Annual meeting, 65th, Philadelphia; abstracts of papers. *ASHRAE J* 1:70-5+ Mr '59
 Annual meeting, 65th, Philadelphia; program. *Heating-Piping* 31:181 Ja '59
 Heating and air conditioning show, 14th and 65th ASHAE meeting. Philadelphia, Jan. 26-29; program, floor plan, list of exhibitors. *Air Cond Heat & Ven* 56:101-7 Ja '59
 How the ASRE council approached the proposed merger. *Refrig Eng* 66:55-6 N '58
 Questions and answers regarding the proposed ASRE-ASHAE merger. *Refrig Eng* 66:50-1 O '58
- AMERICAN society of heating, refrigerating and air-conditioning engineers**
 ASHRAE laboratory and society research. R. C. Jordan and B. H. Jennings. *il ASHRAE J* 1:56-61+ S '59
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AMERICAN society of heating, refrigerating and air-conditioning engineers—Continued

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- Annual meeting, Lake Placid, June 22-24; abstracts of papers on window shading, ventilation, refrigerants. Air Cond Heat & Ven 56:85-7 Ag '59
- Consolidation of the American society of heating and air-conditioning engineers and the American society of refrigerating engineers officially and legally effective. ASHRAE J 1:76 Mr '59
- More dynamic society; a future of even greater proportions. E. R. Queer; C. Boling. Refrig Eng 67:48-9 Ja '59
- Real meaning of ASHRAE. C. Boling. ASHRAE J 1:97 Mr '59
- Research, creativity and the ASHRAE. R. C. Jordan. ASHRAE J 1:62+ S '59
- Research program to be expanded greatly. B. H. Jennings. ASHRAE J 1:91+ Mr '59
- Semi-annual meeting, Minneapolis; abstracts of papers. Air Cond Heat & Ven 55:81 O '58
- Some specific projects; ASHRAE research laboratory. B. H. Jennings. ASHRAE J 1:85 Je '59
- Toward a unified publications program. R. H. Tull. ASHRAE J 1:64-5 Ap '59

Research and technical committee

- Research page bringing together our research and technical activities. ASHRAE J 1:91+ My '59

AMERICAN society of industrial designers

- Annual meeting, Bedford Springs, Oct. 18-21; with abstracts of papers. Product Eng 29:20-1 N 3 '58

AMERICAN society of lubrication engineers

- Administrative committees and chairmen, April 1959-April 1960. Lub Eng 15:372-3 S '59
- Annual meeting, Buffalo, April 21-23; program and abstracts of papers. Lub Eng 15:50-1+, 159-71 F. Ap '59

AMERICAN society of mechanical engineers

- ASME boiler and pressure vessel code; how the code originated; the code in operation. J. H. Harlow; E. M. Kloeblen. Mech Eng 81:56-9 Jl '59
- ASME elects ten to grade of Fellow member. Mech Eng 81:127-30 My '59
- ASME elects thirteen to grade of Fellow member. Mech Eng 81:103-7 S '59
- ASME honors engineers; biographies of recipients and descriptions of honors and awards bestowed during 1958 annual meeting. Mech Eng 81:68-73 Ja '59
- ASME's research committee program. E. M. Barber. diags Mech Eng 81:48-51 F '59
- Annual meeting, New York, Dec. 1-6; abstracts of papers. Combustion 30:53-6 D '58; 49-55 Ja '59; Am Mach 102:93-4 D 15 '58
- Annual meeting, New York, Nov. 30-Dec. 5. Power Eng 63:91-2 F '59
- Annual meeting, 79th, New York; abstracts of papers of interest to industrial plant engineers and executives. Plant 19:53-5 Ja '59
- Annual meeting, 79th, New York, Nov. 30-Dec. 5. Mech Eng 81:74-96 Ja '59
- Annual report, fiscal year Oct. 1, 1957-Sept. 30, 1958. il maps Mech Eng 81:1-25 sec 2 Ja '59

- Aviation conference, Los Angeles. Metal Prog 75:113-16 Je '59

- Challenge to ASME; creativity and innovation in the areas of the research committees and professional divisions. Mech Eng 81:40-2 My '59

- Design engineering conference and show, Philadelphia. Mech Eng 81:102-4 Jl '59

- Human factors professional group established by ASME, under Professional divisions executive committee. Mech Eng 81:127 F '59

- 1958 annual meeting papers availability list. Mech Eng 81:97-101 Ja '59

- 1959 design engineering show and ASME conference; program, exhibitors and their products. Product Eng 30:99-104+ My 11 '59

- Petroleum mechanical engineering conference, Denver, Sept. 21-24, 1958; abstracts of papers. Mech Eng 81:53-60 Je '59

- Petroleum mechanical engineering conference, Houston, Sept. 20-23; program. Mech Eng 81:116-18 Ag '59

- Professional divisions of the ASME; their scope and activities. Mech Eng 81:66-76 Mr '59

- Semi-annual meeting, St Louis, June 14-18. Mech Eng 81:120-6 Ag '59
- Technology executives conference; 6th, Har- riman, N.Y., Feb. 8-10. Mech Eng 81:120-2 Mr '59
- Woman's auxiliary 35th annual meeting, New York, Nov. 30-Dec. 5. Mech Eng 81:119-21 Ja '59

Applied mechanics division

- Annual meeting, Troy, N.Y., June 18-20. Mech Eng 81:114-15 Ag '59

Aviation division

- Annual meeting, Los Angeles, March 9-12. Mech Eng 81:121-3 My '59

Gas turbine power division

- Annual meeting, Cincinnati, March 8-11. Mech Eng 81:118-20 Mv '59

Hydraulic division

- Meeting, 1st, Ann Arbor, Mich., April 13-15. Mech Eng 81:136-7 Je '59

Instruments and regulators division

- Annual meeting, 5th, Cleveland, March 30-April 1. Mech Eng 81:126-7 My '59

Maintenance and plant engineering division

- Annual meeting, 2d, Chicago, May 4-5. Mech Eng 81:141 Je '59
- Annual meeting, 2d, Chicago, May 4-5; with abstracts of papers. Plant 19:55-8 Je '59

Metals engineering division

- Meeting, 1st, Albany, April 29-May 1. Mech Eng 81:138-9 Je '59

Oil and gas power division

- Annual conference and exhibit, 31st, Houston, Texas, April 20-23. Mech Eng 81:134-5 Je '59

Production engineering division

- Meeting, Detroit, May 12-14. Mech Eng 81:106-8 Jl '59

Rubber and plastics division

- Meeting, New York, Dec. 3-4; abstracts of papers. Rubber Age 84:650-1 Ja '59; Rubber World 139:554+ Ja '59

Textile engineering division

- Annual meeting, Clemson, S.C., March 12-13. Mech Eng 81:124-5 My '59

AMERICAN society of perfumers

- Annual symposium on perfumery, 5th. Drug & Cosmetic Ind 84:788 Je '59

AMERICAN society of planning officials

- Annual meeting, 25th, Minneapolis. Eng N 162:25 My 21 '59

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- Financial statements, Sept. 1, 1957, through Aug 31, 1958. Refrig Eng 66:50 D '58
- How the ASRE council approached the proposed merger. Refrig Eng 66:55-6 N '58
- Questions and answers regarding the proposed ASRE-ASHAE merger. Refrig Eng 66:50-1 O '58
- Semiannual meeting, 45th, New Orleans, Dec. 1-3; program and abstracts of papers. Refrig Eng 66:42-53 N '58; 67:50-6+ Ja '59

AMERICAN society of tool engineers

- Annual meeting, 27th, Milwaukee, April 18-22. Tool Eng 42:120-9 Je '59
- Annual meeting, 27th, Milwaukee, April 18-22; abstracts of papers. Am Mach 103:90 My 4 '59; Automotive Ind 120:68+ My 15 '59
- Annual meeting, 27th, Milwaukee, April 18-22; program. Tool Eng 42:141-51 Ap '59
- Honor award winners for 1959 named. il Tool Eng 42:91-3 Mv '59
- Report on professional registration; joins talks on model law. M. L. Stone. Tool Eng 43:94-7 Ag '59
- Semiannual meeting, Los Angeles, Oct. 1-2; with abstracts of papers. Tool Eng 41:123-8 O; 130 N '58
- Society role in research. il Tool Eng 41:91-2 D '58

AMERICAN standards association

- Annual meeting, 40th. Mag of Stand 30:6 Ja '59
- Company member conference, Kansas City, May 6-7; with abstracts of papers. Mag of Stand 30:196-204 Jl '59
- National conference on standards, 9th, New York, Nov. 18-20; program. Mag of Stand 29:300-1 O '58

AMERICAN standards association—Continued

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- Why and how of ASA. C. W. Bryan, jr. Mod Materials Handling 14:86-9 S '59
- World-wide markets loom ahead for American automobiles by participating in international standards work. G. F. Hussey, jr. Automotive Ind 121:59-63+ Ji 15 '59

AMERICAN telephone and telegraph company

- AT&T complying with FCC ruling. F. Chapman. Gas 35:140 Ap '59
- A.T.&T. reports 1959 progress. il Bell Lab Rec 37:148-50 Ap '59
- Annual meeting. 74th. New York. April 15. Bell Lab Rec 37:190-1 My '59

AMERICAN water works association

- AWWA certification policy. Am Water Works Assn J 50:1542-8 D '58
- Annual conference. 78th. Dallas. April 20-25. Am Water Works Assn J 50:1626-37 D '58
- Annual meeting. 79th. San Francisco. July 12-17. Eng N 163:24 Ji 23 '59; Civil Eng 29:668-9 S '59
- Annual meeting. 79th. San Francisco. July 12-17; abstracts of papers. Water & Sewage Works 106:385-9. 440-1. 464 S-N '59; Water Works Eng 112:722-3 Ag '59
- Annual meeting. 79th. San Francisco. July 12-17; program. Water Works Eng 112:503-5+ Je '59
- Board of directors meeting: officers, honors and awards for 1959. Water & Sewage Works 106:152-3 Ap '59
- Committee reports. publications. auditor's report for year ending Dec. 31. 1958. membership awards. membership growth. Am Water Works Assn J 51:521-54 Ap '59
- Directory. membership list. etc. Am Water Works Assn J 51:1-192 pt 2 S '59
- For tasks ahead. and jobs well done: AWWA names officers and awardees. Water Works Eng 112:636-7 Ji '59
- Papers scheduled at 1958 section meetings. Am Water Works Assn J 50:1638-49 D '58
- Pennsylvania section 11th annual meeting. Wernersville; abstracts of papers. Water & Sewage Works 106:366 Ag '59
- Should standards be enforced? L. R. Howson. Am Water Works Assn J 50:1539-41 D '58

Canadian section

- Annual meeting. 39th. Montreal; with abstracts of papers. Water & Sewage Works 106:292-3 Ji '59

AMERICAN welding society

- Annual meeting and show. Chicago. Am Mach 103:97 My 4 '59
- Annual meeting. 40th. Chicago. April 6-10; program and list of exhibitors. Iron Age 183:176-8+ Mr 26 '59; Welding J 38:365-6+ Ap '59
- Bylaws. Welding J 38:489-94 My '59
- Fall meeting. Detroit. Sept. 28-Oct. 1; program. Welding J 38:594-6 Je '59
- Meeting. Chicago. April 6-10; with president's address. Welding J 38:586-93 Je '59
- National fall meeting. Detroit. Sept. 28-Oct. 1; program. Welding J 38:890-3+ S '59
- National officers for 1959-60 nominated. Welding J 37:1202-5 D '58

AMERICAN zinc institute

- Meeting. Chicago. April 22-24; abstracts of papers. Automotive Ind 120:73+ My 15 '59

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- Determination of americium in plutonium by gamma counting. J. Bubernak and others. Anal Chem 30:1759-62 N '58

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Potassium amide
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BAILAR, John C. Jr.Bailar assumes ACS presidency. *por* Chem & Eng N 37:103 Ja 5 '59**BAILEY bridges.** *See* Bridges, Prefabricated**BAINITE.** *See* Steel—Metallography**BAKED products**Recent developments in foods from cereals. W. F. Geddes. *il* J Agri & Food Chem 7: 605-10 S '59**Analysis**Food additive evaluation; cloud point as a means of characterizing the polyglycols of polyoxyethylene (8) stearate. M. D. Brewster and J. D. Brandner. *J Agri & Food Chem* 7:348-9 My '59**BAKER, Ann**Meet a woman tool engineer. S. Olson. *por* Tool Eng 41:93-5 D '58**BAKER, Benjamin P.**Engineering personality. *por* Westinghouse Eng 18:175 N '58**BAKER-NATHAN effect**Solvation effects and the Baker-Nathan sequence. R. A. Clement and J. N. Naghizadeh. *Am Chem Soc J* 81:3154 Je 20 '59**BAKERS and bakeries**Home-style quality rockets small firm into big-time; Brownberry ovens. J. V. Ziemba. *il* Food Eng 31:48-50 S '59In-store baking, freezing is key; New York's Daitch-shopwell stores. *il* Food Eng 31:75-6 F '59**Control equipment**Centralized controls pre-solve problems; National baking co. M. Asproyerakas. *il* Food Eng 30:81-2 D '58**Equipment**Basic approach to automation; integrating product and process. R. C. Gott. *il* Automation 6:43-5 O '59Chemical engineering updates dough making; Fischer baking co.; process flowsheet. C. S. Cronan. *il* Chem Eng 66:98-101 F 9 '59Dream plant come true; the Kitchens of Sara Lee inc. J. V. Ziemba. *il* Food Eng 31: 83-5 O '59Holds profit line with automation; California pie & baking co. A. Astrack. *il* Food Eng 31:82-3 Ap '59Integrated design pays off for job-lot production; Ekco engineering co. *il* Iron Age 183: 71-3 Ap 2 '59Makes better bread continuously. *il* *diag* Food Eng 30:63 D '58Makes flakier sticks; Frisco baking co. J. Meyer. *il* Food Eng 31:70-1 Ag '59Newest trick in mixing. *il* Food Eng 31:74+ My '59Residues in food deriving from processing, hygiene and manufacturing aids. J. B. M. Coppock and R. A. Knight. *bibliog* Chem & Ind p 1419-22 N 1 '58Sanitation, a materials handling problem; program sponsored by American institute of baking. R. G. Zilly. *il* *diags* Mod Materials Handling 14:80-3 Ja '59Unique oven guards quality; Pepperidge Farm's Downingtown, Pa. plant. *il* Food Eng 31:63 Mr '59*See also*

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 Mines and mineral resources
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 Phosphate rock
 Public health
 Roads
 Scientific education
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Bridges. Suspension

Influence lines

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Bridge design

Hudson River bridges

Ore bridges

Pipe lines—Bridge crossing

San Francisco Bay bridges

also subdivision Bridges under names of cities, e.g.

Chicago

Columbia river

Corpus Christi, Texas

Indus river

Mississippi river

Montreal

New York (city)

Philadelphia

Pittsburgh

Toledo, Ohio

Vancouver, British Columbia

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Bridges

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Chemical industries

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Coal mines and mining

Drug trade

Electric apparatus industry

Electric utilities

Electricity supply

Engineering education

Engineers

Fertilizer industry

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Fuel supply

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Industry and state

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Metal trade

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Mines and mineral resources

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Petroleum industry and trade

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Photochemistry
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Colorimetric analysis
Combustion analysis
Dye analysis
Electrochemical analysis
Fluorometric analysis
Gas analysis
Indicators and test papers
Metallurgical analysis
Microanalysis
Mineralogical analysis
Plants—Chemical analysis
Precipitation (chemistry)
Radiochemical analysis
Sampling
Soil analysis
Spectrum analysis
Sugar analysis
Textile analysis
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Carbon dioxide
Cellulose
Chlorides
Flue gas
Formaldehyde
Gasoline
Glass
Hydrocarbons
Niobium oxides
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Carbon
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Diazo compounds
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Corresponding states
Crystallization
Crystallography
Diffusion
Dissociation
Equation of state
Evaporation
Flocculation
Ions
Liquids
Mass (chemistry)
Molecular volume
Molecular weights
Phase rule and equilibrium
Photochemistry
Precipitation (chemistry)
Refraction, Molecular
Solids
Solubility
Stoichiometry
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Thixotropy
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Cellulose
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Chemicals
Clay
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Cosmetics
Electrochemistry
Emulsions
Extraction processes
Filters and filtration (technical chemistry)
Fuel
Glass manufacture
Paper
Paper making
Petroleum distillation
Petroleum refining
Refractory materials
Refrigerants
Rubber, Artificial
Sampling
Soap
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Textile industry
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Vulcanization
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Cotton
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Air preheaters

Castings

Electric motors

Electronic apparatus and instruments

Factories

Fans, Mechanical

Filling machines

Filters and filtration

Gas pipes

Heat exchangers

Heaters

Hosiery machines

Internal combustion engines

Lighting fixtures

Lubrication and lubricants (cutting and grinding)

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- Calculating machines
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- Electronic control
- Electropneumatic control
- Feedback mechanisms
- Governors (machinery)
- Graphic panels
- Hydraulic control
- Level control
- Machinery, Automatic
- Magnetic control
- Pneumatic control
- Servomechanisms
- Telemetering
- Temperature—Regulation

also subdivisions Control and Control equipment under special subjects, e.g.

- Air conditioning equipment
- Airplane engines**
- Airplanes
- Airplanes, Military
- Atomic power plants
- Blast furnaces
- Boilers
- Cranes, derricks, etc.
- Crushing machinery
- Digesters (paper making)
- Drug factories
- Electric furnaces, Steel making
- Electric motors, Alternating current
- Electric motors, Direct current
- Electric plants (central stations)
- Elevators
- Gas burners
- Gas turbines
- Gear cutting machines
- Guided missiles
- Heat treatment shops
- Helicopters
- Hydroelectric plants
- Lathes
- Machine tools
- Machinery
- Magnetic instruments
- Metallurgical plants
- Milling machines
- Multivibrators
- Nuclear reactors
- Open hearth furnaces
- Paper and pulp mills
- Paper making machinery
- Petroleum refineries
- Presses
- Pumping machinery

- Pumps, Feed water
- Reactors, Chemical
- Rolling mills
- Rubber factories
- Servomechanisms
- Shoe factories
- Soot blowers
- Steam plants
- Steam turbines
- Steel works
- Textile machinery
- Traffic signals
- Uranium works
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Ash handling
Coal handling
Cranes, derricks, etc.
Feeders
Hoisting machinery
Loading and unloading
Mechanical handling
Mine haulage
Mine hoisting
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Ore handling
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Cooling towers

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Heat pump

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See also

Cooling towers

Cooling water

Metals. Cold treatment of

Quenching

Shrinkage of metals

Steel. Quenching of

also subdivision Cooling under special subjects, e.g.

Airplanes, Jet propelled

Automobile engines

Brakes, Motor truck

Calculating machines

Concrete

Condensers

Cyclotron

Diesel engines

Diesel engines, Automotive

Electric equipment

Electric generators

Electric rectifiers

Electric resistors

Electric transformers

Electronic apparatus and instruments

Gas engines

Gas turbines

Gas turbines, Aircraft

Internal combustion engines

Motor truck engines

Nuclear reactors

Office appliances

Refrigeration and refrigerating machinery

Rockets

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Synchrotron

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- Electrolytic corrosion
- Erosion of metals
- Galvanizing
- Gas, Natural—Condensate wells—Corrosion problem
- Metal coating
- Metal protection
- Paint, Protective
- Tarnishing of metals
- Water purification—Corrosion control
- Water supply—Corrosiveness
- also subdivision Corrosion under special subjects, e.g.
- Airplanes

CORROSION and anti-corrosives—See also—*Continued*

Aluminum
Automobiles
Boilers
Chemical plants
Condensers
Cooling towers
Copper
Gas turbines
Heat exchangers
Lead
Magnesium
Motor vehicles
Nickel
Oil tanks
Paper and pulp mills
Petroleum—Well tubing
Petroleum pipe lines
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Steam pipes
Titanium
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Water pipes
Zinc
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Chromium nickel steel
Corrosion and anti-corrosives
Paint, Protective
Rubber
Steel, Stainless
Teflon
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- Testing**
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 Labor cost
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 Bridges
 Building
 Chemical plants
 Dams
 Dredging
 Electric plants (central stations)
 Flood control
 Food factories
 Guided missile bases
 Hospitals
 Intakes
 Lighting
 Metal working plants
 Moving pictures in industry
 Petroleum refineries
 Piers
 Reservoirs
 Roads
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Bearings
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Delay devices
Diesel engines
Electric circuit breakers
Electric plants (central stations)
Electric transformers
Electronic circuits
Freight cars
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Compass
Hydrophone
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Fungicides
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Bones—Diseases

Brucellosis

Celiac disease

Diabetes

Diarrhea

Heart—Diseases

Infectious diseases

Influenza

Intestines—Diseases

Lungs—Dust diseases

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Rheumatic fever

Tuberculosis

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 Electric generators
 Electric industries
 Electric instruments
 Electric inverters
 Electric lamps
 Electric machinery
 Electric meters
 Electric motors
 Electric rectifiers
 Electric switchgear
 Electric transformers
 Electricity in mining
 Electricity on the farm
 Electromagnets
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 Oscillators
 Photoelectric cells
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 Radio apparatus
 Reactors
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 - Electric plants (central stations)—Control equipment
 - Electric switchgear
 - Electrohydraulic control
 - Electronic control
 - Metadyne
 - Radio control
 - Selsyn apparatus
 - Servomechanisms
 - Thyratron
 - Voltage regulation

also subdivision Control and Control uses under special subjects, e.g.

- Airplanes
- Airplanes, Military
- Electric heating
- Electric motors
- Electric motors, Alternating current
- Electric motors, Direct current
- Electric motors, Induction
- Gas turbines
- Hydroelectric plants
- Machine tools
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 - Eddy currents
 - Electric circuits
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Electric measurements
Electric meters
Electric switchgear
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Emanuelli, Luigi
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Illuminating engineering society
Institution of electrical engineers

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Electric distribution
Electric driving
Electric heating elements
Electric plants—Equipment
Electric plants (central stations)—Equipment
Electric switchgear
Electric transmission
Electricity in mining
Electricity on the farm

- also subdivision Electric equipment under special subjects, e.g.

- Airplanes
Airplanes, Military
Aluminum works
Apartment houses
Atomic power plants
Automobiles
Breweries
Chemical plants
Coal mines and mining
Cranes, derricks, etc.
Factories
Guided missiles
Hangars
Hospitals
Hotels
Laboratories
Machine shops
Newspaper offices
Office buildings
Paper and pulp mills
Petroleum refineries
Prisons
Railroads
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Electric furnaces, Vacuum melting

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See also

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- Gages, Electronic
- Numerical control
- Scales, Electric
- Transducers
- Translating machines
- also subdivision Electronic equipment under special subjects, e.g.
- Airplanes
- Airplanes, Military
- Automobile factories
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- Hospitals
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- Railroads
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Gas companies
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Oil companies
Paint shops
Paper and pulp mills
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Electric engineering

Engineers

Grouting

Highway engineering

Lighting

Lighting engineering

Marine engineering

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 Foundry machinery
 Furniture industry and trade
 Gas industry
 Instruments
 Machine tools
 Machinery
 Mining machinery
 Motor buses
 Motor cycles
 Motor trucks
 Office appliances
 Packaging
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- Factories—Painting
- Maintenance departments
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Job work

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Machine works

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Material handling
 Mechanical handling
 Office management
 Organization in industry
 Packing for shipment
 Production
 Purchasing
 Quantities (in production)
 Research departments
 Safety devices and measures
 Salvage (waste, etc.)
 Schedules
 Shipment of goods
 Shipping departments
 Spoilage
 Standardization
 Suggestion systems
 Tool engineering
 Tool rooms
 Vacations
 Visitors
also subdivision Management under special subjects, e.g.
 Airplane factories
 Chemical plants
 Drug factories
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Cotton fibers

Glass fibers

Jute

Metal fibers

Paper making materials

Textile fibers

Wool

FIBROSARCOMA. *See* Tumors

FIDUCIAL indicator. *See* Measuring instruments

FIELD-effect tetrode. *See* Semiconductors

FIELD emission microscope. *See* Electron microscope

FIELD houses. *See* Gymnasiums

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Hydraulic filling

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Membranes

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 Gold as money
 Income
 Inflation (finance)
 Silver as money
also subdivision Finance under special subjects, e.g.
 Airports
 Building
 Chemical industries
 Electronics industry
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Fire apparatus

Fire boats

Fire escapes

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Fire service (water supply)

Fireproof construction

Fireproofing of textiles

Inflammable liquids

Inflammable mixtures

Sprinkling systems

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Petroleum industry and trade

Petroleum pipe lines—Pumping stations

Power plants

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 Factories
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 Architecture
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 Electronics industry
 Floods
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- Drops
- Equation of state
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- Gas flow
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Hydrodynamics

Jets

Liquids

Solution (chemistry)

Turbulence

Vaporization

Viscosity

Vortex motion

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Parshall flume

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Dyes and dyeing—Fluorescence

Fluorometers

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Luminescence

FLUORESCENCE spectra. *See* Spectrum—Fluorescence spectra**FLUORESCENT dyes.** *See* Dyes and dyeing—Fluorescence**FLUORESCENT lamps.** *See* Electric lamps, Fluorescent**FLUORIDATION of water.** *See* Water supply—Fluorine content**FLUORIDES**

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Bismuth fluorides
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Gas analysis
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GASES—See also—Continued

Helium
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Drug trade

Electric apparatus industry

Electric industries

Electric plants (central stations)

Electricity supply

Electronics industry

Engineering education

Floods

Food laws and regulations

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Terminals

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See also

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Communication in management

Efficiency, Industrial

Employment management

Engineering departments

Factory management

Foundry management

Industrial engineering

Industrial engineers

Inspection

Inventories

Linear programming

Machine shop management

Machinery, Replacement of

Mine management

Office management

Operations research

Organization in industry

Public relations

Purchasing

Standardization

Suggestion systems

also subdivision Management under special subjects, e.g.

Airplane factories

Automobile factories

Chemical plants

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Dyehouses

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Gas companies

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- Cations
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IOWA

See also

Bridges—Iowa
Geology—Iowa
Medical service, Industrial—Iowa
Petroleum—Iowa
Roads—Iowa
Soils—Iowa
Water laws and regulations—Iowa

IRAN

See also

Electricity supply—Iran
Geology—Iran
Petroleum industry and trade—Iran
Standards—Iran

IRAQ

See also

Building—Iraq
Irrigation—Iraq
Petroleum industry and trade—Iraq

IRELAND

See also

Engineering—Ireland
Mines and mineral resources—Ireland
Petroleum industry and trade—Ireland

Industries and resources

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Deuterium
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Carbon

Cesium

Chromium

Cobalt

Helium

Iodine

Iridium

Iron

Krypton

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Plutonium

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See Radiotherapy

ISRAEL

See also

Architecture—Israel

Design—Israel

Metal working industries—Israel

Nutrition problems—Israel

Petroleum industry and trade—Israel

Petroleum pipe lines—Israel

Scientific education—Israel

ITABIRITE. See Iron ores

ITALY

See also subdivision Italy under special subjects, e.g.

Aeronautic research

Atomic power plants

Automobile industry and trade

Bridges

Chemical industries

Gas. Natural—Pipe lines

Geology

Hydroelectric plants

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Christmas lighting

Daylight

Daylight, Artificial

Electric lamps

Gas lighting

Glare

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House lighting
Light projection
Mine lighting
Office lighting
Photography of lighting
Photometry
Stage lighting
Street lighting
Tunnel lighting
also subdivision Lighting under special subjects, e.g.

Aeronautic instruments
Airplane factories
Airplanes
Airport buildings
Airports
Albany, New York
Auditoriums
Automobile sales buildings
Bank buildings
Barber shop
Beauty shops
Bridges
Capitols
Churches
College buildings
Dining rooms
Electric plants (central stations)
Factories
Food stores
Fountains
Gardens
Gasoline service stations
Golf links, Miniature
Gymnasiums
Hotels
Living rooms
Lobbies (architecture)
Machine shops
Macon, Georgia
Mens stores
Moving picture photography
Museums
Newark, New Jersey
Parks
Photography
Plastic murals
Public buildings
Race tracks
Restaurants
Roads
School buildings
Ships
Shoe stores
Shopping centers
Showrooms
Stadiums
Stock exchange buildings
Store buildings
Synagogues
Television studios
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Textile mills
Theaters
Traverse City, Michigan
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International commission on illumination

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 Keys and keyways (machinery)
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Bending machines

Broaches

Broaching machines

Chucking machines

Cutting machines

Cutting tools

Drilling and boring machinery

Gear cutting machines

Grinding machines

Honing machines

Lapping machines

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Metal work
Milling cutters
Milling machines
Planing machines
Pneumatic tools
Polishing machines
Presses
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Saws, Metal working
Screw machines
Shears (machines)
Slotting machines
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- Automobiles—Manufacture
- Broaching
- Centering (machine work)
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- Honing
- Indexing (machine work)
- Locating (machine work)
- Machine shop practice
- Reaming
- Time study (of machinery)
- Tolerance
- Trepanning
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Electric measurements
Frequency measurement
Gages
Gas measurement
Length measurement
Magnetic measurements
Optical measurements
Photometry
Pressure measurement
Radio measurements
Standards of length
Thickness measurement
Time measurement
Transistors—Measurement uses
Vacuum tubes—Measurement uses

Volume

Weighing

Wood measurement

X rays—Measurement uses

also subdivision Measurement under special subjects, e.g.

Beta rays

Distances

Gamma rays

Gearing

Neutrons

Petroleum

Porosity

Radiation

Radioactivity

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Tanks

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Gages
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Meters
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 - Egg handling
 - Electric trucks, Industrial
 - Gravel handling
 - Guided missile handling
 - Hoisting
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 - Lifting magnets
 - Loading and unloading
 - Loading machines
 - Mail handling
 - Manipulators

Material handling equipment distributors association

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- Mine hoisting
- Monorail conveyors
- Motor trucks
- Ore handling
- Paper handling
- Pipe handling
- Pneumatic conveying
- Pneumatic machinery
- Positioning equipment
- Racks
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- Sand and gravel plants
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See also

- Deformation (mechanics)
- Dynamics
- Engineering
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- Fluids
- Force and energy
- Friction
- Hydrodynamics
- Hydromechanics
- Hydrostatics
- Hysteresis (mechanics)
- Inertia (mechanics)
- Liquids
- Load (mechanics)

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Motion
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Pressure
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- Cutting tools
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- Drilling and boring (metal working, etc.)
- Electric cutting
- Electrochemical cutting
- Gear cutting
- Grooving
- Lubrication and lubricants (cutting and grinding)
- Machine tools
- Milling
- Milling cutters
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- Lapping
- Peening
- Planing
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- Polishing, Electrolytic
- Shot blasting

METAL finishing—See also—*Continued*

Shot peening
Steel cutting
Surfaces
Tumbling barrels
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Aluminum
Magnesium
Steel
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Beryllium, Powdered
Cermets
Copper, Powdered
Iron, Powdered
Magnetite, Powdered
Molybdenum, Powdered
Nickel, Powdered
Oxygen cutting—Powder lance coating
Steel, Powdered

METAL powders—See also—Continued

Thorium, Powdered
Tin, Powdered
Titanium, Powdered
Tungsten, Powdered
Uranium, Powdered

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Aluminum coating
Chromizing
Electroplating
Enamel and enameling
Galvanizing
Glass—Joining to metal
Metal coating
Paint, Protective
Painting, Industrial
Phosphate coating
Plastics—Joining to metal
Zinc coating

also subdivision Protection under special subjects, e.g.

Aluminum
Magnesium
Molybdenum
Steel
Thorium
Titanium
Uranium
Zinc

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Gas pipes
Pipe lines
Piping
Steel

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Copper industry and trade
Iron industry and trade
Lead industry and trade
Magnesium industry and trade
Metal workers
Metal working industries
Metals—Prices
Metals, Non ferrous
Nickel industry and trade
Steel industry and trade
Tin industry and trade
Zinc industry and trade

Canada

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Metallurgical plants—Waste
Scrap metal
Slag
Tailings

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Beryllium work
Brazing
Cans, Aluminum—Manufacture
Copperwork
Dies
Electroplating
Extrusion process
Flanges
Forging

Foundry practice
Heat treatment
Machine tools
Magnesium work
Metal drawing
Metal spinning
Peening
Pickling (metals)
Plating
Punching
Punching machinery
Rolling (metal work)
Sheet metal work
Shells (metal work)
Shot peening
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Stamping
Steel work
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Titanium work
Tool engineering
Tubes, Steel
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Wire

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See also

Sheet metal work, Architectural

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See also

Foundries—Employees

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Flotation process

Furnaces, Metallurgical

Germanium metallurgy

Gold metallurgy

Hydrometallurgy

Iron metallurgy

Lead metallurgy

Lithium metallurgy

Manganese metallurgy

Metallography

Metallurgical laboratories

Metallurgical plants

Metallurgical research

Metals

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Copper
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Electrodeposition of metals
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Electrons—Emission from metals
Etching (metals)
Fatigue in metals
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Glass—Joining to metal
Gold
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Heat treatment

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 Lithium
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 Metallography
 Mineralogy
 Mines and mineral resources
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Gas, Natural—Pipe lines

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also subdivision Models under special subjects, e.g.
 Airplane wings
 Atomic power plants
 Atoms
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 Calculating machines
 Dust collectors
 Kitchens
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- Gas, Natural
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NAS, NRC space science board. Phys Today 11:48 O '58

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NATIONAL aluminate corporation

Career opportunities. il Chem & Eng N 37:25 pt 2 Ja 26 '59

NATIONAL association of broadcasters

Annual meeting, 37th, Chicago. Electronics 32:47 Ap 10 '59

NATIONAL association of corrosion engineers

Annual conference and corrosion show, 15th, Chicago, March 16-20; program with abstracts of papers. Corrosion 15:75-6+ Ja '59

Annual conference, 15th, and corrosion show, Chicago, March 16-20th. Corrosion 15:93-4+ My '59

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NATIONAL association of hosiery manufacturers

Meeting, Atlantic City. Textile Ind 123:131+ Jl '59

NATIONAL association of housing and redevelopment officials

Annual meeting, 25th, San Francisco. Arch Forum 109:13 N '58

NATIONAL association of lighting maintenance contractors

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NATIONAL association of litho clubs

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NATIONAL association of railroad and utilities commissioners

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NATIONAL bituminous concrete association

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NATIONAL concrete masonry association

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Region 6 meeting, Oct. 13-14; with abstracts of papers. Concrete 66:29-31 D '58

NATIONAL conference of electric and gas utility accountants

Annual conference, Chicago, April 20-22. Am Gas Assn Mo 41:21-4+ Je '59

NATIONAL conference on industrial hydraulics

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NATIONAL conference on standards

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Annual meeting, Skytop, Pa. June 1-4; abstracts of papers. Air Cond Heat & Ven 56:79-83 Jl '59; Heating-Piping 31:100-1 S '59

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Code tables. Elec Constr & Maint 58:11-15 Mid-S '59

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NATIONAL electrical manufacturers association

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Exposition, 23d, New York, Dec. 1-5. Combustion 30:46 N '58; Plant 18:44 N '58; Power Eng 63:92 F '59

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Reports. Ind Med 28:319 J1 '59

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Congress, 46th, Chicago. Eng N 161:21-2 O 30 '58; Safety Maint 116:18-19+ D '58

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NATROJAROSITE. See Jarosite**NATURAL gas. See Gas, Natural****NATURAL gasoline. See Gasoline, Natural****NATURAL resources**

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Coal
Fuel
Gas, Natural
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NATURAL steam. See Steam, Natural**NAUTICAL instruments**

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Quadrant

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 Marine engineering
 Masts and rigging
 Motor ships
 Shipbuilding
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Sea power

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 Pilots and pilotage
 Radar aids to navigation
 Radio aids to navigation
 Safety at sea

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Gas, Natural—Nebraska
 Petroleum—Nebraska
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Agriculture

Architecture

Chemical industries

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Petroleum

Sewerage

Steel works

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Copper mines and mining

Gas, Natural

Geology

Gold mines and mining

Mercury mines and mining

Mines and mineral resources

Petroleum

Petroleum industry and trade

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Hydroelectric plants—New Brunswick

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Water supply—New England

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Roads—New Hampshire

NEW JERSEY

See also

Electric utilities—New Jersey

Mines and mineral resources—New Jersey

Roads—New Jersey

NEW MEXICO

See also subdivision New Mexico under special subjects, e.g.

Bridges

Gas, Natural

Geology

Petroleum

Petroleum industry and trade

Uranium mines and mining

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Motor bus lines—New Orleans

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Electricity supply—New York (city)

Gas, Natural—New York (city). Supply to

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NEW YORK (state)

See also subdivision New York (state) under special subjects, e.g.

Architecture, Domestic

Electric lines

Electric utilities

Electricity supply

Gas, Natural

Geology

NEW YORK (state)—See also—*Continued*

Hydroelectric plants
 Mines and mineral resources
 Petroleum industry and trade
 Roads
 Water laws and regulations
 Water supply

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Bridges
 Chemical industries
 Coal mines and mining
 Electric plants (central stations)
 Warships

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NEWPORT**Architecture**

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NEWS photography. See Photography, Journalistic**NEWSPAPER offices**

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- Amplifiers
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- Automobile engines
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- Cooling towers
- Crystal diodes
- Electric machinery
- Electric motors
- Electric motors, Induction
- Electric resistors
- Electric transformers
- Electronic apparatus and instruments
- Fans, Mechanical
- Foundry machinery
- Gas burners
- Gas turbines, Aircraft
- Guided missiles
- Heat exchangers
- Helicopters
- High fidelity sound systems
- Hospitals
- Internal combustion engines
- Lawn mowers
- Machinery
- Motor cycles
- Motor vehicles
- Moving picture machines
- Oil burners
- Oscillators
- Petroleum—Well drilling
- Power plants
- Pumps, Centrifugal
- Radio receiving apparatus
- Radio resistors
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- Refrigerators
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Deodorants

Deodorization

Gas, Natural—Odorizing

Paint—Deodorizing

Paper—Odors

Resinous products—Odors

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Smell

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 Building and loan association buildings
 Electric utilities—Buildings
 High buildings
 Insurance company buildings
 Medical buildings
 Oil companies—Buildings
 Printing offices
 Telephone company buildings
 Trade union buildings

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 Office buildings, Industrial—Air conditioning

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OFFICE equipment industry**Exhibitions**

- Business equipment show dominated by automation, electronics. *il* Product Eng 30:26-4 O 5 '59

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- Contractor modernizes office with prefab luminous ceiling; Trowbridge electric co., Roseburg, Ore. *il* Elec Constr & Maint 58:127-8 Je '59
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Billing
Executives
Files and filing (documents, etc.)

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Dentists offices
Newspaper offices
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OHIO

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- Architecture, Domestic
Coal mines and mining
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Electric utilities
Gas, Natural
Geology
Petroleum
Petroleum industry and trade
Roads
Sewerage
Water, Underground
Water supply

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- Linseed oil
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- Lubricating greases
- Lubricating oils
- Menhaden oil
- Oil industries
- Oil seeds
- Peanut oil
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Metallurgy
Separators
Sintering
Smelting
Tailings

OREGON

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Pipe laying
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See also

- Air pipes
 Gas pipes
 Petroleum—Well casing
 Petroleum—Well tubing
 Petroleum pipe lines
 Pipe fitting
 Pipe joints
 Pipe laying
 Pipe lines
 Piping (power plants)
 Plumbing
 Sewer pipes
 Steam pipes
 Tubes
 Water pipes

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See also

Sewer pipes, Asbestos cement

Manufacture

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See also

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Manufacture

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See also

Sewer pipes, Concrete
Sewers, Concrete
Water pipes, Concrete

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See also

Air pipes, Plastic
Gas pipes, Plastic
Tubes, Plastic
Water pipes, Plastic

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Ship propulsion

Solar power

Steam

Wind power

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Cement plants

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Forge shops

Metallurgical plants

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Petroleum refineries

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Lithography
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Photomechanical processes
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- Electric contractors
- Factories
- Gas companies
- Highway engineering
- Maintenance departments
- Municipal departments
- Plumbing shops
- Public works departments
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Cement research

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 Gas research
 Glass research
 Government research
 Heating research
 Highway research
 Industrial research
 Lighting research
 Lubrication research
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Amphiboles
Boulders
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Corundum
Folds (geology)

ROCKS—See also—Continued

Geochemistry
Gneiss
Granite
Laterite
Limestone
Metamorphism
Mineralogy
Pebbles
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Batholiths
Dikes (geology)
Gneiss
Granite
Lava
Pegmatites
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See also
Limestone
Sandstone
Shale

ROCKSLIDES. *See* Landslides

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ROCKY Mountain region

See also
Electric utilities—Rocky Mountain region
Geology—Rocky Mountain region
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ROCKY mountains

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ROLLERS, Road. See Road rollers**ROLLING (metal work)**

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 Steel, Strip
 Thread rolling

ROLLING mills

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SCREENING

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Sewer cleaning
Sewer design
Sewer pipes
Sewers, Concrete
Water pollution

also subdivision Sewerage under names

of cities, e.g.

Abilene, Texas

Atlanta

Aurora, Illinois

Austin, Texas

Boise, Idaho

Camden, New Jersey

Chicago

Cincinnati

Columbus, Ohio

Detroit

Durham, North Carolina

Edmonds, Washington

Hampton Roads, Virginia

Jackson, Michigan

Jacksonville, Florida

Los Angeles

Mexico (city)

Middletown, Ohio

Milwaukee

Minneapolis

New York (city)

Panama City, Florida

Pittsburgh

Racine, Wisconsin

St Paul

San Antonio

San Diego

San Jose, California

Spokane, Washington

Sydney, Australia

Tacoma, Washington

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Toledo, Ohio

Toronto

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Kaolin

Mica

Mullite

Narsarsukite

Pegmatites

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- Diamonds
- Garnet

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Hygiene, Industrial
Imports
Liquefied petroleum gas
Metal working industries
Mortality
Oils and fats
Paint industry and trade
Petroleum
Petroleum industry and trade
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 Piping (power plants)
 Power plants
 Steam, Natural
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Granite
Gravel
Marble
Quarries and quarrying
Rocks

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Coal storage
Cold storage
Factories—Yards
Grain storage
Oil storage
Racks
Shelving, Steel
Warehouses
Water storage
also subdivision Storage under special subjects, e.g.

Apples
Bushings, Insulating
Chemicals
Chlorine, Liquid
Cottonseed
Cottonseed oil
Fish as food
Food, Frozen
Fruit
Gas, Natural
Liquefied petroleum gas
Lubricating oils
Machine tools
Methane, Liquid
Oils and fats
Paint materials
Paraffin
Potatoes
Propane
Tobacco
Wheat

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Storage

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Driveways

Dust prevention

Snow removal

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Cherryville, North Carolina

Chicago

Detroit

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Elasticity

Factor of safety

Fatigue in metals

Hardness

Impact

Metals—Failure

Stiffness

Strains and stresses

Structures, Theory of

Tensile strength

Torsion

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Cement

Concrete

Glass

Paper

Plastics

Steel

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See also subdivision Sweden under special subjects, e.g.

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American society for testing materials

Electric testing

Impact

Laboratories

Magnetic testing

Sampling

Testing machines

Textile testing

also subdivision Testing under special subjects, e.g.

Airplane engines

Airplane parts

Airplanes, Military

Automobile lamps

Automobile parts

Axles

Beams and girders

Brazing

Bronze

Building materials

Cams

Cast iron

Castings

Ceramic materials

Chromium plating

Columns, Concrete

Columns, Steel

Compressors

Concrete

Concrete blocks

Copper

Copper plating

Corrosion and anti-corrosives

Corrosion resisting materials

Cotton fibers

Cutting tools

Dust collectors

Electric apparatus and appliances

Electric cables

Electric equipment

Electric lamps, Mercury vapor

Electric lines

Electric resistors

Electric substations

Electric transformers

Electric welding

Enamel and enameling

Finishing materials

Foundation soils

Gages

Gas meters

Gas turbines, Aircraft

Glass

Governors (machinery)

Guided missiles

Hardness

Heat resisting materials

Internal combustion engines

Iron

Iron alloys

Joints

Lubricating greases

Magnetic materials

Materials

Metal protection

Metals

Milk

Mortar

Nickel

Nickel plating

Nuclear reactors

Paint

Paper

Paper, Laminated

Petroleum products

Plastics

Polyethylene

Polymers

TESTING—See also—*Continued*

Pumps
Pumps, Centrifugal
Refractory materials
Refrigeration and refrigerating machinery
Rubber
Rubber, Artificial
Sealing compositions
Ship plates
Springs (mechanism)
Steel, Stainless
Steel castings
Television antennas
Television receiving apparatus
Thread
Titanium
Titanium alloys
Trade waste
Transistors
Tubes
Tubes, Steel
Water
Watt hour meters
Welding
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Wood pulp
Zirconium

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Engineering laboratories
Sound laboratories
Underwriters laboratories

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Architecture, Domestic
Electric utilities
Gas, Natural
Geology
Paint industry and trade
Paleontology
Petroleum
Petroleum industry and trade
Petroleum laws and regulations
Petroleum pipe lines
Roads
Sulfur mines and mining
Water supply

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TEXTILE chemistry

- See also*
 Bleaching
 Cotton finishing
 Fireproofing of textiles
 Rayon finishing
 Resinous products—Textile uses
 Sizing (textiles)
 Textile analysis
 Textile fibers, Synthetic
also subdivision Chemistry under special subjects, e.g.
 Cotton
 Dyes and dyeing
 Wool

TEXTILE chemists and colorists, American association of. *See* American association of textile chemists and colorists**TEXTILE design**

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 Bleaching
 Carpets
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 Knit goods
 Laundry
 Mens furnishing goods
 Military fabrics
 Napping of textiles
 Nylon
 Nylon fabrics
 Parachute fabrics
 Pile fabrics
 Rayon
 Rubberized fabrics
 Rugs
 Shirting
 Singeing (textiles)
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 Textile finishing
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Analysis*See* Textile analysis**Bonded web**

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Waste, Utilization of

also subdivision Waste under special subjects, e.g.

Automobile factories

Bleacheries

Canneries

Cement plants

Chemical plants

Coke plants

Drug factories

Electroplating

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Ferryboats
Freight cars
Highway transportation
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Mine haulage
Motor trucks
Motor vehicles
Ore transportation
Packing for shipment
Petroleum pipe lines
Rapid transit
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Electricity supply—Vancouver, British Columbia

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Equation of state

Evaporation

Fumigants

Vapor pressure

Water vapor

VARACTOR. *See Crystal diodes***VARIABLE stars.** *See Stars, Variable***VARIABLES (mathematics)**Automatic control system design; mathematical techniques, complex variables. I. Ritow. *diags Elec Manuf* 63:99-105 Ap '59Correlation structure of morphometric properties of drainage systems and their controlling agents. M. A. Melton. *bibliog diags J Geol* 66:442-60 JI '58; Correction. 67:125 Ja '59Dimensionless numbers. D. F. Boucher and G. E. Alves. *bibliog Chem Eng Prog* 55:55-64 S '59Effect of basic process variables on phosphate fertilizer production. J. D. Hatfield and others. *bibliog Ind & Eng Chem* 51:677-82 My '59Effect of variables on reductions by alcohol and potassium in ammonia. J. F. Eastham and D. R. Larkin. *bibliog diags Am Chem Soc J* 81:3652-5 JI 20 '59Method for the solution of the Nth best path problem. W. Hoffman and R. Pavley. *diags Assn for Computing Mach J* 6:506-14 O '59Multiple variation in structure-reactivity correlations. S. I. Miller. *bibliog diag Am Chem Soc J* 81:101-6 Ja 5 '59N-bromosuccinimide; allylic bromination, a general survey of reaction variables. H. J. Dauben, jr. and L. L. McCoy. *bibliog Am Chem Soc J* 81:4863-73 S 20 '59Numerical quadrature in many dimensions. D. Morrison. *Assn for Computing Mach J* 6:219-22 Ap '59**VARIANCE analysis**Application of variance component analysis in the transistor industry. R. W. Anderson and A. W. Wortham. *diag Ind Quality Control* 14:11-15 Mr '58; Discussion. 16:12-14 JI '59

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Potatoes

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Automobiles

Bicycles

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Electricity supply

Gas, Natural

Geology

Petroleum

Petroleum industry and trade

Steel works

Television broadcasting

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Air filters

Air pollution

American society of heating and air conditioning engineers

Cooling

Dust removal

Electric fans. Ventilating

Exhaust systems

Fans, Mechanical

Gas appliances—Ventilation

Mine ventilation

Plumbing—Ventilation

Tunnel ventilation

also subdivision Heating and ventilation under special subjects, e.g.

Air raid shelters

Apartment houses

Atomic research laboratories

Barns and stables

Churches

Dining rooms

Electric plants (central stations)

Factories

Foundries

Greenhouses

Gymnasiums

Hospitals

Hydroelectric plants

Laboratories

Machine shops

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Motels

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See also

Balancing of machinery

Oscillations

also subdivision Vibration under special subjects, e.g.

Automobiles

Beams and girders

Bridges

Electric generators

Electric lines

Electronic apparatus and instruments

Gas turbines

Grinding wheels

Machinery

Motor vehicles

Phonograph

Piping (power plants)

Ships

Spinning machinery

Steam turbines

Water pipes

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 Filters and filtration
 Filtration plants

Fire service (water supply)

Hot water supply

Pumping stations

Reservoir

Water. Underground

Water collectors

Water conservation

Water consumption

Water distribution

Water districts

Water purification

Water storage

Water supply engineering

Water tanks

Watersheds

Waterworks

Wells

also subdivision Water supply under names of places, e.g.

Akron, Ohio

Amsterdam, Netherlands

Athens, Ohio

Austin, Texas

Baltimore

Bethlehem, Pennsylvania

Bloomington, Illinois

Bridgeport, Connecticut

Bridgman, Michigan

Caracas, Venezuela

Chicago

Cleveland

Cleveland, Tennessee

Coalinga, California

Dallas, Texas

Denver

Detroit

East Tawas, Michigan

Eau Claire, Wisconsin

Fort Lauderdale, Florida

Gary, Indiana

Glasgow

Highland Park, Michigan

Holland, Michigan

Hull, England

Indian Hill, Ohio

Iron Mountain, Michigan

Lafayette, Indiana

Lake Charles, Louisiana

Lancaster, Pennsylvania

Lincoln, Illinois

London

Los Angeles

Michigan City, Michigan

Middletown, New York

Narragansett, Rhode Island

New Castle, Indiana

New York (city)

Newark, New Jersey

Newport Beach, California

Oak Park, Michigan

Oakland, California

Oklahoma City

Ossining, New York

Philadelphia

Pittsburg, Kansas

Point Barrow, Alaska

Portland, Oregon

Rahway, New Jersey

Rockford, Illinois

St Louis

St Paul, Minnesota

St Romuald, Quebec

Salt Lake City

San Diego, California

San Francisco

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Specific gravity
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Bridges—Welding operations

Electric welding

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Hard facing

Oxyacetylene welding

Shipbuilding—Welding operations

Solder and soldering

Ultrasonic welding

also subdivision Welding under special subjects, e.g.

Aluminum

Beryllium

Cast iron

Copper

Magnesium

Metal foils

Molybdenum

Nickel

Pipe lines

Piping

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WEST

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Electronics industry—Western states

Geology—Western states

Mineral industries—Western states

Mines and mineral resources—Western states

Paper industry and trade—Western states

Petroleum—Western states

Petroleum laws and regulations—Western states

Water supply—Western states

WEST VIRGINIA

See also subdivision West Virginia under special subjects, e.g.

Coal mines and mining

Gas, Natural

Petroleum

Petroleum industry and trade

Roads

Water supply

WESTCHESTER county, New York

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